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ABSTRACT

This review and synthesis is the second in a series of analyses of the literature in the field of distributive education. The 149 citations range from 1965 to 1969 but emphasize 1966-1968. Topic areas are Philosophy and Objectives, Manpower Needs and Employment Opportunities, Curriculum Development, Educational Programs, Instructional Materials and Devices, Learning Process and Teaching Methods, Student Personnel Services, Teacher Education, Administration and Supervision, Evaluation, and Miscellaneous Studies. The number and percent of studies reviewed in each of the 11 major categories for the years 1965-1968 are presented in tabular form. Collectively, curriculum development, evaluation and teacher education were the focus of 51 percent of research in distributive education during this 3-year period. A bibliography is included. The first edition covering research prior to 1965 is available as ED 011 565. (CH)

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review and

synthesis of research on

Distributive Education

second edition

ERIC CLEARINGHOUSE
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REVIEW AND SYNTHESIS OF RESEARCH ON DISTRIBUTIVE EDUCATION 1966—1968

Second Edition

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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PREFACE

This *Review and Synthesis of Research on Distributive Education* is one of a series of "state of the art" papers in the vocational and technical education and related fields. It should assist in identifying substantive problems and methodological approaches for researchers, as well as providing practitioners with a summary of research findings which have application to educational programs. In the field of vocational and technical education, the pace of research and development activities has increased considerably during the period under review. Gaps which exist for some readers are probably the result of the author's prerogative to be selective.

As one of a series of information analysis papers released by the ERIC Clearinghouse on Vocational and Technical Education, this review is intended to provide researchers and practitioners with an authoritative analysis of the literature in the field. Those who wish to examine primary sources of information should utilize the bibliography. Where ERIC Document numbers and ERIC Document Reproduction Service prices are cited, the documents are available in microfiche and hard copy forms.

The profession is indebted to Roger A. Larson and Richard D. Ashmun for their scholarship in the preparation of this report. Recognition is also due Harland E. Samson, Professor, University of Wisconsin; Kenneth L. Rowe, Associate Professor, Arizona State University; and Peter G. Haines, Professor, Michigan State University for their critical review of the manuscript prior to its final revision and publication. Joel Magisos, information specialist at The Center, coordinated the publication's development.

Members of the profession are invited to offer suggestions for the improvement of the review and synthesis series and to suggest specific topics or problems for future reviews.

Robert E. Taylor
Director
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and Technical Education
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INTRODUCTION

This *Review and Synthesis of Research on Distributive Education* was done for the years 1966 through 1968. The first edition was published by The Center for Vocational and Technical Education in 1966 and included a review of research done through 1965, and did include some studies that were done in 1966. The study was done by Professors Warren G. Meyer and William B. Logan.

The 1966-68 edition is a continuation of the effort to bring about better coordination and efficiency in distributive education research. The first edition has been very valuable to researchers and practitioners as a guide to sources of information and to assist in planning and carrying out needed research. It was intended that the present edition would add another link to the growing chain of research findings in distributive education.

The report includes all studies dealing with distributive education, including education and training done by business firms and by private, as well as public, educational institutions. The 1966-68 edition of the review and synthesis is divided into the same 12 categories, plus a miscellaneous section, that were developed by Meyer and Logan. This provides the basis for an easy reference to research by categories and for comparing the kinds of research included in both editions. It also serves as a basis for comparing research in other vocational fields. An attempt was also made to utilize the same organization within categories, but in some cases subcategories were deleted or added in order to present the findings in a descriptive manner.

Once again an attempt was made to include all of the doctoral dissertations in distributive education that the authors were able to locate that were done during the years 1966-68; all of the masters' theses, whether classified as a thesis or master's paper; and pertinent independent papers. A fairly detailed description of the nature of the research studies may be found on pages 105-109.

Information for this review and synthesis was obtained from several sources. Requests for the identification and location of studies were sent to all teacher educators and state supervisors listed by the U.S. Office of Education, and to other persons who may have information regarding completed studies. In addition, the authors checked lists of studies in *Dissertation Abstracts,* the *National Business Education Quarterly, Masters' Theses in Education,* and *ERIC.*

There are several limitations evident in the report. First, the data include all studies about which the authors could obtain information. In some cases, only the title and source of the study were obtained as respondents and did not include an abstract or other suitable information. Second, some institutions do not permit the loan of studies and the authors could not be located to obtain personal copies, and third, no attempt was made to assess the quality of individual research studies. Nevertheless, it was gratifying to

learn that a considerable amount of research had been done during the three-year period. It was evident that the quantity of research had increased as compared with previous years.

We would like to express our appreciation to all persons who assisted us on the project. Without the cooperation of teacher educators and state supervisors who identified the relevant research, and the coordinators, graduate students, and other distributive personnel who provided us with copies of abstracts and studies, this review would not have been possible.

Richard D. Ashmun
Roger A. Larson

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REVIEW AND SYNTHESIS OF RESEARCH ON DISTRIBUTIVE EDUCATION

1966—1968

Second Edition

PHILOSOPHY AND OBJECTIVES

Very little research was done during the period of this report that dealt with philosophy and objectives. Four studies were included, two of which were in the area of general vocational education. The remaining two studies pertained primarily to beliefs and issues and were included in this section. In addition, some comments are made relative to the "Essex Report" of 1968.

Vocational Education in General

Two vocational education studies of a general nature seemed to have implications for distributive education. Von Schaaf (1966) constructed a rationale for the purpose of establishing a fundamental basis for vocational education and to provide criteria for the assessment of the social forces researched. The basic assumptions of the rationale contained concepts relating to the nature of man, man and work, employment opportunities, and the role of education in the preparation for work. Vocational and technical education programs were recommended for: 1) in-school and out-of-school youth; 2) adults, both in general and vocational education; 3) women and minority groups; and 4) individuals that may wish to continue to upgrade skills and to train for more difficult occupations. It was also apparent, because of a constantly changing society, that there was a need for continuous assessment of the social forces. The effects of the social forces reflected society's attitude toward the individual, indicating the need to include the worth and value of the individual in educational practices.

Keller (1968) identified 264 statements of beliefs pertaining to principles of vocational education. An attempt was made to obtain a degree of agreement regarding each statement of belief from 25 supervisors of vocational-technical education in the U.S. Office of Education's Region VIII. The original list of 264 statements was sorted and combined into 91 final statements of belief in nine descriptive categories for curriculum, definitions, evaluation, guidance, leadership, organization, and administration, people served, teacher education, and trends. The respondents "agreed" or "strongly agreed" with 55 of the 91 statements. They "did not agree" or "strongly disagreed" with two statements of belief. Statements of belief developed by Keller related to vocational education in general but have implications for distributive education, especially when compared to the statements of belief concerning distributive education that were developed by Crawford (1967).

Beliefs and Issues

A variation of Q-methodology was used by Crawford (1967) to determine the basic beliefs concerning all phases of the distributive education program. In-depth group interviews were used to determine the perceptions of

selected distributive education state supervisors, teacher educators, and teacher-coordinators concerning the critical tasks of the distributive education teacher-coordinator in relation to the philosophy of distributive education. During this part of the research (Phase I), Crawford obtained a high degree of agreement for 96 basic beliefs. These beliefs, as a philosophy of distributive education, formed the theoretical structure for her research.

Nye (1967) conducted a study to identify the major issues relating to distributive teacher education. It was expressed by many of the respondents that a cooperative working relationship between the university and the state department of education would be highly desirable to provide an effective teacher education program as it relates to distributive education within a state. Several other issues were identified and will be reported in the chapters on "Teacher Education," and "Administration and Supervision."

Essex Report

The Advisory Council on Vocational Education (1968) reviewed the administration and status of vocational education programs conducted under the provisions of the Vocational Education Act of 1963. The Council presented their views on the issues and problems of vocational education within the context of changing social, economic, and educational conditions. The report includes the Council's recommendations for the improvement of vocational education. Several references are made specifically to distributive education, mainly in regard to enrollment, costs, and teacher education.

MANPOWER NEEDS AND EMPLOYMENT OPPORTUNITIES

In their 1966 report, Meyer and Logan referred to a publication of the United States Department of Labor, entitled *Manpower—Challenge of the 60's*, which predicted that sales jobs, along with those in office and professional fields, would show rapid growth during the present decade. In the last three years, studies which deal with manpower needs and employment opportunities in distributive occupations continue to bear out this prediction. These recent studies appear to be of two types. One type, primarily of an occupational survey nature, has as its main purpose to determine present or future employment opportunities in distributive occupations. The other type includes studies which assess the number and nature of work stations for distributive education cooperative students. Several of this second type were conducted in communities where programs already existed, with the purpose of determining whether they should be continued or expanded. In other instances they were conducted to ascertain the feasibility of introducing a cooperative distributive education program in a local school system. Several of the studies in this section reported employ-

ment opportunities for graduates as well as identified specific training possibilities for cooperative distributive education students.

Occupational Surveys

Seven of the studies reported were designed to survey the need for distributive employees in a local community or on a statewide basis. Timpany (1967) surveyed business firms in Manitowoc, Wisconsin to determine the number of persons employed in distributive occupations, the number of vacancies currently available, and the projected number of openings during the next five-year period. He found high predicted needs for trained distributive education employees and concluded that the community could and would support educational programs in marketing. Of the 468 firms that completed and returned the questionnaire only 104 indicated that they provided some form of training programs within their firm or through parent-company sponsored programs.

Clark's study (1968) produced similar conclusions, highlighting the present and future needs for trained distributive employees in the Roseville, Minnesota school district. He noted that the current assured replacement rate of distributive employees was 17.24 percent and that the next five years would see a demand for an additional 23.29 percent of distributive employees to meet the expansion of marketing activity.

Rurey (1966) obtained information from a random sample of 35 firms in Highland Park and Highwood, Illinois to help determine the type of office and sales jobs available to high school graduates. He found that positions immediately available to high school graduates were typist, bookkeeper, sales clerk, cashier, and billing clerk. By means of a search of United States Census data and other literature, Brenholtz (1967) analyzed occupational data and vocational enrollment trends in Texas between 1950 and 1967. His study encompassed a broad range of vocational fields, but his findings in respect to distributive education revealed increases in the number of occupations listed and in school enrollments. He concluded that distributive education should have additional emphasis placed on both secondary school and adult programs.

In another statewide occupational survey, Carey (1966) analyzed the growth potential of various industries and projected their future in terms of employment possibilities. Results of the study indicated that the distributive manpower needs of the 1970's would be greatest in the service areas such as finance, insurance, and real estate and in the broad general area of retailing, wholesaling and transportation. Scavetta (1967) studied the long-term trend in the field of wholesaling, concluding that promise of good full-time employment opportunities justified continuance of the pilot program in wholesaling offered at Hartford Public High School. He also recommended that the program be expanded into a two-year program.

A study by Stai (1968) was concerned with the area of agribusiness; in particular, examine career opportunities and to determine future trends in the expanding agribusiness fields. Information was compiled from period-

icals, books, and reports. He concluded that the field of agribusiness offered a wide range of career choices for students and that distributive education can provide many of the necessary occupational skills.

The seven studies just discussed, which had as a major aspect the surveying of employment opportunities in distributive occupations, seemed in agreement that opportunities do now exist and will increase during the foreseeable future. The implications for continued and expanded educational programs to prepare people for employment in these occupations was obvious.

Training Opportunities for Cooperative Students

Four of the studies reported dealt entirely or in part with the problem of assessing the degree of interest and support the business communities had for the cooperative distributive education programs. Holmgren (1967) attempted to secure information necessary for the planning and development of cooperative office and trades and industrial programs necessary to support the expansion of the existing distributive education program in the community of Osseo, Minnesota. His survey included all those businesses located within the townships served by the Osseo school district. His returns indicated that a large number of the local businesses employed high school students on a part-time basis and that sufficient interest in distributive occupations was registered to warrant expansion of the cooperative distributive education program. Clark (1968), in the same study commented on earlier in this section, sought answers to questions similar to those asked by Holmgren. His study, however, dealt entirely with distributive education needs. He also found ample employment opportunities for cooperative students and a willingness by employers to provide enough additional training stations for both increased enrollments and greater diversification of student interest.

Malkan (1967) sought evidence of a need for an expanded work-study program at the Mamaroneck, New York Public High School. In addition, he attempted to determine the directions an expanded program could possibly take and whether the business community could, and would, supply the necessary experiences for an expanded program. Data was obtained by surveying the then present tenth-grade class of the high school, conducting a follow-up study of the class of 1961, surveying the places of business in the Larchmont-Mamaroneck area, and visiting six different school systems to observe work-study programs of varying types. He found that at least one-third of the business firms were definitely interested in the program and that there were sufficient numbers and varieties of jobs available to provide the program with great flexibility.

Scheel (1967) used a structured interview technique which included a discussion of the objectives of cooperative education and the completion of a questionnaire. The purpose of the study was to determine the willingness of Naperville, Illinois firms to participate in cooperative programs. He

reported that 59 percent of the firms with which interviews were conducted were willing to participate in cooperative distributive education and to appoint a training sponsor for the student learners who would be able to provide a series of progressive learning experiences.

Two studies were conducted for the basic purpose of determining the advisability of establishing cooperative distributive education programs in high schools. The title indicated that that was the nature of a study by Aune (1968) for the Novato, California community. Since the authors of this review were not able to obtain a copy of that study, it is reported here by author and title only. A very thorough field study of the receptivity of distributive education in the Lake Washington District of the State of Washington was conducted by McGuire (1968). She used questionnaires and interviews to obtain information from students, businessmen, and high school administrators. After evaluating all responses, she concluded that a high degree of interest did exist and that a program could be supported in that community. Although most of the school administrators did indicate support for a distributive education program, they did cite some anticipated problems including the following: 1) limitation of space due to crowded school conditions; 2) cost of equipment; 3) difficulty in finding a competent, vocationally certified teacher; and 4) the scheduling conflicts in instituting a two-hour block of time program.

Two other studies by Goins (1968) and Morton (1968) looked into the need for post-secondary marketing programs. In the following section, both of these studies will be discussed in more detail along with other post-secondary studies.

A very significant conclusion made by the authors of several studies pertaining to manpower needs and employment opportunities in distributive occupations was that the contacts made with the business community, whether by mailed questionnaire or interview, served as excellent devices to publicize, promote, and inform businesses regarding cooperative education programs.

The Manpower Report of the President transmitted to the Congress in April, 1968, is a very comprehensive study of manpower requirements, resources, utilization, and training. Of particular significance to distributive educators is chapter four of that report entitled, "Bridging the Gap from School to Work." It notes that despite the fact that the United States keeps larger proportions of its children in school longer than does any other nation to insure their preparation for lifetime activity, yet the unemployment rate among youth is far higher here than in any other industrial nation. Equally significant is the high degree of underemployment. The President's Report suggests a variety of approaches to this problem. First on this list of approaches was improvement in the educational system and great expansion of cooperative education programs to prepare young people better. Considered in this context, the research efforts of distributive educators to analyze manpower needs and to translate these needs into expanded and improved programs are well-conceived.

CURRICULUM DEVELOPMENT

No attempt has been made in this report to examine general curriculum development because Meyer and Logan (1966) did such an extensive review. The reader should keep in mind, however, that much can be gained from keeping in tune with the research that is done in other curriculum areas and make applications of appropriate strategies in developing vocational education curriculum development research studies.

Curriculum Development in Vocational Education

There continues to be much emphasis on curriculum development in vocational education at all levels. There is the search for specific curriculums, i.e. curriculums designed to prepare persons for specific occupational clusters, as well as curriculums designed for general vocational capabilities. There is also an emphasis on the groups, or people, to be served through vocational education programs. An example would be the major thrusts of the *Vocational Education Amendments of 1968.* Special emphasis is placed on helping the disadvantaged, physically handicapped, persons who have completed or left high school, and consumers and homemakers. The need is evident to continue existing programs, but stress is placed on extending and expanding vocational education programs at all levels. This means that vocational educators are faced with the challenge of developing new curriculums especially designed to meet the needs of more people.

A fresh look is being taken at the needs of learners in vocational education programs as related to the requirements of employers. The process of integrating these two factors is commonly referred to as work adjustment. Worker satisfaction and employer satisfaction with the worker serves as a conceptual framework for determining the integral elements of the curriculum. These elements also provide a sound basis upon which to develop the criteria for evaluating learner performance and the effectiveness of program operation. The implication is that a sound vocational education program is constantly in tune with the needs of students, the community, and society.

General Curriculum Development in Vocational Education

It seems appropriate to view the segment of research dealing with general curriculum development in vocational education as a means of leading into a discussion of the research pertinent to curriculum development in distributive education. With this purpose in mind, several ideas have been abstracted from the Review of Educational Research, October, 1968, which treats vocational, technical, and practical arts education. The material in this section is taken almost entirely from the Review. Most of the material is abstracted from Chapter IV, "Curriculum Development."

Interest in curriculum development research has increased since 1962. Much of the recent research was more soundly designed than were earlier studies. The curriculum development literature reviewed by Phipps and Evans emphasized: 1) the identification of content common to clusters of occupations and to all kinds of work; 2) the development of curriculums for students with special needs; 3) the adaptation of curriculums to changes in educational approaches and technology; 4) the identification of curriculum changes required by technological developments; and 5) attention to occupational areas that were previously overlooked or considered unworthy.

Phipps and Evans (1968) state that, "Rapid changes in the world of work due to technological developments, new societal pressures, and recognition of existing problems have motivated research to guide curriculum development." Technological changes, such as automation, have influenced many new techniques and processes in the world of work that have implications for the training of workers. Local requirements are considered to be important, but the mobility of the worker must also be recognized by curriculum planners and developers. It is also necessary to study the needs of workers when making curriculum revisions. In recent years, there has been more emphasis on the development of theories or models for curriculum development, and this trend is expected to continue.

Curriculum research strategies to determine needed curriculums have centered around several approaches. There is the "family of occupations or 'cluster' approach," which deals with attempts to determine occupations that required similar kinds of knowledge and skill. The concept is one of preparing persons for a family or cluster of occupations instead of a single occupation in order for the worker to move forward with technological change. The "transferability approach" refers to studying the content needed in vocational education curriculums that have a high transfer value for many different kinds and levels of jobs, jobs that may not be in a job family or job cluster. The "competency pattern approach" refers to determining the tasks or competencies needed in various occupational categories. The "functions of industry approach" deals with an overall theoretical framework to guide curriculum development for all occupations, regardless of the type or level of competencies required. The "curriculum guide approach" refers to the preparation of curriculum guides in content areas for vocational education. It seems appropriate that the above approaches will be utilized by researchers to design future studies. Phipps and Evans make a point of emphasizing the need for more innovative and imaginative studies, since most research designs and procedures related to curriculum development in vocational education have been relatively simple. The advent of new techniques and technological hardware, such as the computer, should provide the means for undertaking more complex, in-depth research. Researchers in vocational education are also becoming more numerous and better equipped to conduct the kinds of research so vitally needed for an objective approach to curriculum development in vocational education.

New and Changing Occupations

The March, 1969 issue of the *American Vocational Journal,* a professional vocational education publication, is devoted exclusively to articles regarding "Vocational Education—Curriculum for New and Changing Occupations." In an article by Gordon I. Swanson; Howard F. Nelson; and Warren G. Meyer (1969), entitled "A Conceptual Framework—Vocational Curriculum," the authors listed eight imperatives as being crucial to the interpretation and implementation of a modern concept of the vocational curriculum. The eight imperatives were: 1) that educational programs make provision for occupational instruction for all students, irrespective of their future goals; 2) that the first goal of vocational programs be to equip students with salable, intellectual and manipulative skills and to give them a base of occupational experience that will add relevance and adaptability to their vocational goal achievement; 3) that maximum effort be given to curriculum development which can accelerate the rate of skill achievement and retard the rate of skill obsolescence; 4) that vocational education provide experiences which will help the student to identify his talents, to relate these talents to the world of work, to identify an occupational interest, and to develop such talents as will widen his choices and improve the skills required for success; 5) that curriculum innovators determine what and how much generalized vocational preparation and specialized preparation will make a graduate employable in the current and future labor market; 6) that competence to enter the job be held as the minimum requisite for graduation and that eligibility for placement be regarded as the minimum completion requirement; 7) that the vocational curriculum satisfy the needs of learners in their vocational development as well as the needs of employers in their competitively productive environments, with the ultimate goal of producing competent, well-adjusted workers and citizens; 8) that curriculum developers engage in research to determine the most effective and efficient programs for preparing individuals for occupational employment. The eight imperatives have been repeated here because of the relevance to planning and operating sound vocational education programs for the future, and as a basis for areas in which to conduct future research.

Work Adjustment

Garbin *et al.* (1967) sampled 69 vocational educators as to their perceptions of certain attitudes, values, behavior patterns, and situations that were problematic to youths in their adjustment to work. Some of the conclusions were: 1) a large number of youths have unrealistic aspirations and expectations as to the requirements and rewards of their initial jobs; 2) problems of adjustment occur when perceptions of role functions are not congruent with reality; 3) many students lack maturity, responsibility, and self-discipline because they have not had the opportunity to learn and inculcate the values which are requisites for occupational adjustment; 4) there were specific problems in personality, behavior, and sociocultural

factors; 5) more emphasis should be placed on effective objectives in vocational education; and 6) part-time work would aid in making a smoother transition.

Slow Learners and the Disadvantaged

There are many studies and projects in progress, or that have been completed, that deal with slow learners, and the so-called disadvantaged. Most of these are of a general vocational education nature and are too numerous to mention in this report. Two projects are reported in order to give some idea of the kinds of things that are being undertaken. Sutton (1967) is involved in a three-phase project involving placing slow learners in jobs. During Phase I, 21 students in the slow-learner range were placed in local community jobs. Results indicated that job selection was at a level within student performance capabilities. Blue (1968) was the author of a handbook designed for use by employers and supervisors who would be involved in hiring and training disadvantaged persons. Major emphasis is given to understanding the nature and characteristics of such persons, and ways in which job success can be assured through appropriate education and training. The handbook has value for training sponsors and other persons who will have increasing responsibility for helping disadvantaged persons develop occupational skills.

Curriculum Development in Distributive Education

General Content from Community Sources

The business community continues to be a source of data and information that is pertinent in the development of curriculums and content for distributive education. Forbes (1967) investigated changes in retail structure of metropolitan areas in the United States from 1929 to 1963. He found that store density (stores per capita) had decreased at a rapid rate and that sales per store had increased correspondingly for most of the major store classifications. It was also found that, in general, as the population of the metropolitan area increased, there was a less than proportional increase in the number of stores. Forbes suggested a model to assist in investigating retail structure change that included the variables of population, income, and population growth rates, and the effects of changes in the mix of products sold by different types of retail stores.

Retailers have been slow in accepting marketing research as an objective management tool. Hartley (1967) conducted a study to: 1) ascertain the present status of retail research and the extent of its use; 2) evaluate the contributions of research to retail decision-making, and make recommendations for its more effective use; and 3) discover fertile areas for research not presently tapped by most retailers. The study was limited to large retailers. It was found that 32 of the 53 firms had formal research departments, yet the quality of the research varied widely. Most research

was related to operations and store-location decisions. There was little research in the major decision-making areas of merchandising, promotion, organization, and staffing. Consumer research, market-share analyses, controlled experimentation, and long-range research were rare. Much research was routine, and of a "checking-up" or control nature. The more effective research departments were characterized by a wide scope of activities and a significant number of important studies. Gaining management acceptance of research was found to be a major problem confronting most retail research departments. Criticisms of research resulted from lack of understanding of the role and function of research, poorly conducted studies, or studies with ill-defined objectives. Hartley recommended that if research is to achieve a more important role in retailing, 1) researchers, in general, need to communicate better with management and to demonstrate the value of research as an aid in retail decision-making; and 2) management must be prepared to place the researcher in a position high enough in the organization to be influential.

Consumers are important sources of information regarding the operation of retail stores. Whitbeck (1967) designed a study to analyze consumer behavior and to translate the findings into a guide for promotional programming. The problem area involved a consideration of why consumers are attracted to a particular full service department store while rejecting one or more other stores. Consumers make most patronage decisions on the basis of image. To convert the qualitative aspect of image into a quantitative concept, the total store image was divided into six components of product suitability, services, hospitality, satisfaction with purchases, location, and value. Whitbeck found that the consumer arrays the components in order of their relative importance in making buying decisions and according to how well the subject store performs the functions associated with the components. This was especially true for customers of particular stores. Therefore, the active customer provides management with a standard image, and can inform the retailer not only of the proper guidelines for promotional programming but in the event of errors can indicate the direction and magnitude of the required modifications.

Business operations and functions are often the basis for research that has implications for curriculum development. Jamison (1968) proposed a plan to help the small business executive improve his advertising program. He obtained information from textbooks, advertising periodicals, national associations for retailers, and 60 small businessmen in the Alleghany County, Covington, and Clifton Forge, Virginia area. He found that small businessmen seem to be interested in results and not the techniques of advertising. Also, there was a lack of coordination between the small businessmen and the advertising agencies; there was a lack of appropriate planning; and the advertising was followed too closely. Haskey (1966) developed criteria for evaluating the purchasing department of institutional businesses and industrial firms in Virginia by determining the factors being used in purchasing department evaluation by such firms. He concluded that

most firms did not have a formal evaluation system for rating their purchasing activities. The use of standards for evaluation was dictated by the size of the firm and the complexity of their operations. It was also found that many firms did not have written manuals on purchasing policies and procedures.

Better business bureaus and trade associations may be important sources of information. Steele (1967) evaluated certain aspects of the Better Business Bureau in Richmond, Virginia by interviewing 230 persons. Some of the conclusions were: 1) persons in the Richmond area looked upon the Bureau mainly as a service organization; 2) persons who have used the service show a wide interest; 3) many persons are uncertain as to the source of Bureau membership, executive officers, or financial support; 4) consumer protection was perceived as the primary purpose of the Bureau. By and large, services for which people had called upon the Bureau to perform were considered to be effective and successful. Loomer (1967) analyzed the training requirements of a representative sample of trade associations in Virginia, and attempted to develop operational guidelines for managing educational programs to meet the training needs of these trade associations. He used a mailed questionnaire to obtain the data, and found that the most common training needs of the trade associations were in customer relations and human relations. Problems cited were in the areas of human relations, personnel management, public relations, communications, recruitment of personnel, and expense control.

Specific Occupational Content from Community Sources

Research has been increasing in the area of determining specific occupational tasks which serve as a basis for the development of courses of study and materials for individual use by students in distributive education classes. Crawford (1967) interviewed, 1) workers in 76 jobs in a two-step career continuum in seven categories of distributive businesses, and 2) supervisors of these jobs in order to determine the critical tasks of these workers. In Volumes II, III, and IV are found the critical tasks of selected workers, competencies to perform the tasks, and a cross-tabulation of competencies needed by workers in selected categories of business. Volume II includes the critical tasks for workers in department stores and variety stores. Volume III lists the tasks for workers in food stores, service stations, and wholesaling firms. Volume IV includes the tasks for workers in hotels/motels and restaurants. The work done by Crawford would be most valuable for curriculum workers concerned with high school, post-secondary, and adult distributive education curriculums. The tasks are listed by job title according to specific job duties and related job duties. A coding system is used to indicate whether the tasks were performed: 1) regularly, 2) occasionally, or 3) never. Provision was also made for the interviewees to add tasks that were not listed on the interview sheet. Of particular value is the cross-tabulation of tasks by jobs. This procedure provides an easy reference

to the kinds of tasks that are performed in several job categories. The information would be helpful in planning curriculum, as well as in establishing training plans for distributive education students who may be employed in these firms. Crawford also categorized tasks, along with the jobs in which these tasks were performed, according to major competency areas. These areas were: 1) advertising, 2) communications, 3) display, 4) human relations, 5) mathematics, 6) merchandising, 7) operations and management, 8) product or service technology, and 9) selling. The competencies and jobs were further categorized in cross-tabulated form in the area of knowledges, skills, and attitudes. Crawford's work is considered to be highly significant in the field of distributive education and has made important contributions to curriculum development at all educational levels, including teacher education. The impact of her work on research is evident from the number of studies that have been generated as a result of the competency approach to curriculum construction.

Ertel (1966) designed a study to: 1) develop a research instrument to identify the major tasks and associated knowledges necessary for successful employment in the merchandising operations of modern retail firms; and 2) analyze the knowledges necessary to perform the major tasks in the retail field in order to identify the clusters of concepts common to all the vocational fields and conversely to isolate those concepts unique to the field studied. Specifically, he attempted to identify tasks for department stores, limited price variety stores, and general merchandise stores; 33 firms and 900 employees were sampled. The sample included both supervisory and non-supervisory personnel. Tasks were categorized under: 1) selling; 2) keeping and counting stock; 3) operating checkstand and sales register; 4) receiving, checking, and marking merchandise; 5) delivery; 6) keeping accounts and records; 7) computing information using mathematical skills; 8) planning and arranging interior and window displays; 9) planning, preparing, and placing advertisements; 10) buying merchandise for resale; 11) pricing merchandise; and 12) controlling merchandise. There were 332 tasks listed in the 12 categories.

Ertel found discrepancies in the type of work actually done and the content of some distributive education programs in King and Pierce Counties in the State of Washington. It was concluded that students should be helped to adapt to a broad range of tasks. It was found that there was a slight chance of moving into supervisory positions without some post-secondary training. Another finding was that tasks involving technical aspects of planning, preparing, and placing advertisements, and most display activities, are performed by a limited number of in-store or commercial specialists. It was stated that more emphasis should be placed on the coordinating of these tasks than the technical aspects. A fourth conclusion was that in high school programs aimed at preparing non-supervisory college bound youth for entry positions in merchandising divisions, the major emphasis should be on selling, stockkeeping, and cashiering competencies.

Other skills are inherent in these tasks, such as basic skills and human relations.

Peck and Denman (1968), in a study which was national in scope, conducted interviews with businessmen and surveyed distributive education teacher-coordinators to find out: 1) what personal characteristics, knowledge, and skills that employees in marketing and distribution-type jobs should have to perform effectively on the job; 2) how many classroom hours it would take to teach the requisite topics; and 3) where those topics could most effectively be taught. Firms surveyed included 250 in the retail trade, wholesale trade, services trade, transportation and public utilities, and finance, insurance, and real estate. Both employer and employee opinions were obtained. Important and unimportant subject areas were listed. The important subject areas included: 1) job knowledge; 2) human relations, personal characteristics; 3) communications; 4) mathematics; 5) salesmanship; and 6) internal organization relationships and planning. The relatively unimportant areas were: 1) marketing, 2) business machines, 3) economics, and 4) bookkeeping and accounting. Subject areas were as important in large firms as in small firms. An important conclusion was that designers of distributive education curriculums should not try to have all subjects covered in the distributive education classroom. Instead they should design a program which insures that the graduate will be well prepared in all important subject areas but will receive his training in some of them under teachers who are specialists in their subject and not distributive education teacher-coordinators.

Areas of Distribution Content from Community Sources

McGorman (1969), working with the Distributive Education Section of the Deleware State Department of Public Instruction, the Distributive Education Clubs of America, Inc., and the Melville Shoe Corporation, is in the process of conducting a three-phase project to develop, test, and evaluate a special program in distributive education that would provide occupational training and placement for disadvantaged youth in retailing. The planning phase has been completed, with the next being to establish experimental programs as identified in Phase I.

Van Blois (1968) attempted to determine the importance of an automobile salesman's knowledge of the product, in conjunction with personality and sales techniques, in selling effectiveness. He found these factors were relatively unimportant. The three factors that did contribute to effectiveness were: 1) amount of formal education, 2) sales experience within the industry, and 3) attendance at a manufacturer-sponsored training program. It was found that a salesman's product knowledge was not influenced by any of these factors.

Vizza (1967) sought to determine the educational and training background of chief sales executives, and their superiors, of large industrial goods firms, and their opinions regarding educational and training require-

ments for the chief sales executive of the 1980's. He found that most chief sales executives of large industrial goods firms hold at least a bachelor's degree and among chief sales executives holding a graduate degree, most have majored in business administration at the graduate level. The respondents were strongly in favor of professional education, as opposed to liberal arts education, for future industrial sales executives.

Christianson (1967) examined and analyzed the educational and occupational histories of the members of the Racine, Wisconsin Sales and Marketing Executives Club in an attempt to discover if there was a common factor or combination of factors leading to their choice of marketing as a career. He found that few of the respondents had majored in marketing, but most considered the business courses taken as beneficial.

Peterburs (1967) attempted to determine the characteristics, traits, and behaviors of retail salespersons that were most important in judging job satisfactoriness. He sampled 59 employers in retail firms in the Minneapolis, Minnesota metropolitan area and concluded that: 1) retail salespersons were discharged mainly due to poor attitudes toward work; and 2) retail salespersons were promoted primarily because of a positive attitude toward their jobs. More specific characteristics, traits, and behaviors were included within the major categories stated above. Rurey (1966) found that the most important traits for beginning salespersons were accuracy, initiative, attendance, and dependability. Major deficiencies were in the areas of poor attitudes, lack of dependability, and lack of concentration.

Educational Objectives in Distributive Education

There has been much emphasis on learner performance and the determination of educational objectives in all fields, and this emphasis is evident in distributive education. The work done by Crawford (1967) spurred two of her graduate students to undertake master's studies designed to construct educational objectives by using lists of critical tasks for distributive workers. Hawkins (1968) proposed to: 1) construct educational objectives that would assure the development of technical competencies needed by distributive workers in the selling area of the general merchandise category of distribution, 2) classify the identified educational objectives into the cognitive and affective domains, and 3) to construct illustrations of specific objectives in order to provide a basis for constructing test items and to suggest evaluation devices. The educational objectives that were constructed were classified into one of the six broad categories of the cognitive domain or one of the four broad categories of the affective domain. She provided illustrations of specific objectives, based on the selected educational objectives, and suggested evaluation devices for each of the specific objectives. The two conclusions were: 1) the educational objectives based on competencies needed by workers in the selling area of the general merchandise category of distribution are usable in curriculum guides; and 2) the classification of educational objectives for the selling area according to levels of complexity

or degrees of internalization makes possible the incorporation of the objectives into the various levels of instruction in the distributive education curriculum.

Sites (1968) followed a similar pattern to: 1) construct educational objectives that would aid in developing technical competencies needed by distributive workers in the operations and management area of the general merchandise category, and 2) classify the educational objectives into the cognitive domain. He found: 1) the usefulness of objectives in developing courses of study and lesson plans, and 2) educational objectives can be clustered around topics in a given subject area.

A pattern seems to be evolving for studying the construction of educational objectives in distributive education. It seems apparent that more research will be done in the near future that will result in changes in the content and teaching methods for preparing distributive workers.

Studies of Off-Farm Agricultural Occupations

Two studies were located that dealt with distributive functions and competencies in off-farm agricultural occupations. Gleason (1967) attempted to discern the content appropriate to curriculum development for educational programs that prepare workers for the retail farm machinery industry of Michigan. The first phase of the study consisted of an analysis of the industry to develop a taxonomy of technical and personal-social competencies required of workers in the industry. The second phase of the study involved verifying the content identified in the initial phase to determine validity and appropriateness to curriculum development. A jury of experts rated the activities and competencies according to importance. Four functions common to the retail farm machinery businesses in Michigan were: 1) selling, 2) service, 3) management, and 4) records and accounts. The management and service functions were selected for further analysis, with 75 activities identified for the management function and 76 for the service function. The curriculum areas related to distributive education were inventory control, personnel evaluation and supervision, attitudes and habits, advertising, merchandising, public relations, and sales.

The purpose of a study by Albracht (1966) was to demonstrate a process for determining vocational competencies needed for the performance of the sales function in the feed industry, and the loci at which the competencies could be taught. An interview instrument was developed that contained 40 competencies which appeared to be important for the performance of nine essential feed sales activities. A jury of 24 members experienced in the performance of the sales function of the feed industry rated the competencies as to the degree of being essential or nonessential. A conclusion was that 21 of the competencies were considered essential for the performance of the nine feed sales activities.

Secondary School Distributive Education Curriculum Studies

Only one study was reviewed that dealt specifically with secondary school distributive education curriculum in general. Baughman (1966) conducted a study to determine the objectives and general content of a tenth grade preparatory course in distributive education. He reviewed pertinent literature, interviewed selected school administrators, and consulted with the state staff for distributive education. Ten specialists were asked to review the objectives and list specific knowledge and skill which they felt a student should acquire from a course designed to prepare a student for the world of work. The state staff was given the responsibility to formulate final objectives and general content, along with suggestions, for topics, units, and projects. The basic core curriculum was decided upon between Baughman, a research consultant, and the state supervisor for distributive education. It was found that there was a need for a revision of the "Area of Study Concept," a need to identify a pertinent textbook, and a need to re-examine the total distributive curriculum from grades 10 through 12.

Post-Secondary Distributive Education Curriculum Studies

There seems to be an increase in the amount of emphasis placed on research in post-secondary distributive education curriculum development. This is probably due to the fact that the number of programs has increased due to the impact of state and federal legislation.

Post-Secondary Curriculum Surveys

There have been many informal surveys conducted to establish post-secondary distributive education programs, but very few formal surveys were located that could be reviewed. Morton (1968) surveyed seven state supervisors, 10 teacher educators, and 62 post-secondary teacher-coordinators in USOE Region VI to determine what courses should be offered during the first year of a two-year marketing program. His significant findings indicated that orientation, salesmanship, Marketing I, English I, and business mathematics should be offered during the first semester of the program. The second semester should include merchandise display, social studies, principles of retailing, Marketing II, English II, and merchandise mathematics. The psychology of human relations should also be offered during the first year, but no preference was indicated for either semester. It is interesting that no mention was made of supervised cooperative occupational experience. Most programs surveyed by Morton were relatively new in operation, having started within the five years prior to his study.

Jones (1968) did a descriptive study of the post-secondary distributive education curriculum in the area vocational-technical schools in the State of Georgia. He obtained the objectives of the programs; described the curriculums in terms of instructional units, course content, instructional time, and texts and instructional aids; and categorized the information in terms of objectives, instructional units, course content, instructional time, and texts, and instructional aids.

Goins' (1968) main objective was to determine the need for a post-secondary distributive education program in Chattanooga, Tennessee, but in the process he surveyed 33 post-secondary distributive education programs in 16 states to determine areas of study, length of training programs, entrance requirements, types of student recognition, on-the-job training requirements, costs to students, kinds of programs, core requirements, and elective courses available. The most common major areas of study were marketing and mid-management training. Most schools required the high school diploma for admission, and most offered the Associate in Arts or Science degree. Most schools also required on-the-job (cooperative) training. The most frequently offered core courses were on-the-job training, economics, accounting, introduction to marketing, salesmanship, business law, advertising, principles of management, business mathematics, introduction to business, merchandising, communications, and human relations. Not much information was obtained on elective courses, or on the use of advisory committees.

Lucas (1967) developed guidelines for establishing post-secondary distributive education programs. Most of his study was of an evaluative nature, and will be reported later, but he did conclude that there are generalizable characteristics appropriate to the organization and operation of post-secondary programs.

Summa (1968) conducted an intensive investigation in the United States to analyze the existing retail management curriculums offered by junior and community colleges, and ascertained what implications such curriculums might have on the development of improved core curricula for retail mid-management programs offered in two-year post-secondary institutions. Summa reviewed 61 junior and community college catalogues to determine present course offerings. He also obtained opinions from a national advisory committee composed of state supervisors of distributive education and specialists in post-secondary programs. His conclusions included the following: 1) Retailing curriculums are identified by terms such as retail management, middle management, business-merchandising, and marketing-middle management; 2) Almost all junior and community colleges offer some type of associate degree; 3) Most offered some opportunity for experience in a work environment as an integral part of the program known by such terms as internship, field training, work experience, on-the-job training, supervised employment, cooperative work experience, etc.; 4) Post-secondary distributive education programs are organized and administered with little direction from the state or federal vocational education

agencies evidenced by the wide variety of course offerings. Summa listed the courses offered most commonly during the first and second years, which are too numerous to mention in this report. However, the national advisory committee recommended several courses that were lacking or mentioned only a few times as being offered. These courses were: 1) psychology of selling and advertising, 2) human relations, 3) merchandising, 4) sales promotion, and 5) merchandise information.

Post-Secondary Feasibility Studies

An additional aspect of Goins' study (1968) was that he surveyed business firms in five major categories of operation in the Chattanooga, Tennessee area to determine the need for mid-management training. Two-thirds of the firms used on-the-job training to train mid-management personnel. The businessmen were also asked to rank marketing courses according to degrees of importance. The courses ranking highest were salesmanship, human relations, supervision, training of employees, personnel, management, sales promotion, and fundamentals of management. It was determined that employees need training before being hired. It was also found that most firms selected mid-management personnel from among their present employees, the second choice was four-year college graduates, and the third choice was two-year post-secondary graduates. Over 40 percent of the firms said they would provide on-the-job training for students enrolled in the program, and 48 percent said they would hire two-year graduates of the post-secondary distributive education program.

Bennett and Janssen (1968) determined the feasibility of offering cooperative distributive education during the spring semester of 1968 at the College of San Mateo, California. The students were to be employed in the San Francisco area. About 80 percent of the employers were in agreement with the cooperative concept, and 54 percent agreed with the alternate semester plan. It was recommended that the program be adopted and that California develop a master plan for cooperative education at the junior college and higher education levels. The alternate semester plan was recommended very highly.

Sheeks (1968) conducted a study to determine the need for a post-secondary program designed to prepare persons for sales occupations in home furnishings firms in the Minneapolis-St. Paul, Minnesota metropolitan area. He sampled 64 large and small furniture dealers to determine their employment needs. He found that a considerable number of salespersons would be needed by these firms. He also found that the retail furniture dealers were in favor of establishing a post-secondary program for training home furnishings salespersons. A large number of the firms were willing to provide on-the-job (cooperative) training, and would be willing to hire graduates of the program.

It seems that most post-secondary feasibility studies are conducted by local agencies (schools) and are difficult to locate when doing a review of

research. More of this type of research needs to be formalized and made available to persons who wish to conduct similar studies.

Post-Secondary Evaluative Studies

Two studies dealt with post-secondary curriculum evaluation. Lucas (1967) sent a questionnaire containing 39 controversial statements to 147 respondents including selected state supervisors of distributive education, teacher educators of distributive education, post-secondary instructors, and employers. There was a majority agreement in each of the four groups on 25 of the items. Based upon an analysis of the data, he concluded that the following guidelines were appropriate for establishing post-secondary distributive education programs: 1) In the planning stages, the services of the representative of the distributive education section of the state department should be sought. An advisory committee is desirable during the planning and operational stages of the program, and a comprehensive survey of the geographical area should be conducted to determine need and interest; 2) The program should be offered in various types of institutions; 3) The associate degree should be awarded for successful completion of the program; 4) Work experience is considered highly desirable, therefore, the program should be operated on a cooperative basis; 5) The cooperative feature should be continuous for the duration of the program; 6) Each distributive education curriculum within the post-secondary educational institution should be organized to serve a specific area of employment, such as hotel/motel, supermarket, and petroleum; 7) Students enrolled in the program should participate in the post-secondary division of the Distributive Education Clubs of America. Lucas' study has been published and distributed through the Council for Distributive Teacher Education, Professional Bulletin series Number 14, *Guidelines for Establishing Post-Secondary Distributive Education Programs,* 1968.

Larson (1967) compared students at the University of Minnesota who had successfully completed the General College Retailing and Selling Program with General College students who had not participated in the program. Most of Larson's findings pertain to student evaluation and will be reported in the section on "Evaluation." However, Larson did conclude that students of the General College who did not participate in the program were just as likely to enter and remain in distributive occupations as were students who did participate in the program. Larson did an extensive review of the literature in post-secondary distributive education and also found a lack of research specifically related to this level of instruction.

A third study, by Kohlman (1966), dealt with evaluation of a specific program. An abstract of the study was not obtained in time to report the nature of the population or the findings.

Post-Secondary Content Studies

Sheeks survey (1968) of 64 large and small furniture dealers in the

Minneapolis-St. Paul area included an attempt to determine the knowledges and skills required by home furnishings salespersons in order to develop courses, content, objectives, and methods of instruction for a post-secondary program designed to prepare home furnishings salespersons. Some of the skills and knowledge listed were: 1) estimating and measuring skills, 2) the ability to sell quality rather than possess specific furniture knowledge, 3) considerable knowledge and skill concerning sitting equipment, lamps and accessories, and carpeting. Sheeks concluded that educational institutions should work closely with the industry to establish programs to train salespersons, and should do more research to identify specific tasks performed on the job, the proper attitudes to develop, and the areas in which salespersons derive job satisfaction.

Wilson (1967) revised and constructed a practical outline and guide to be used in post-secondary distributive education orientation programs. Objectives were listed along with specific suggestions for content. Pick (1967) suggested requirements for a new field study course, but data on the study were not available at the time this report was written.

Characteristics of Post-Secondary Students

Ball (1967) obtained information on the characteristics of students entering post-secondary distributive education programs in 15 vocational, technical, and adult schools in Wisconsin. He obtained data on 644 students who were enrolled during the spring semester of 1965-66. Some of the findings included the following: 1) a median age of 20 years; 2) more than 85 percent were male; 3) 93 percent were single; 4) 63 percent were residents; 5) occupational objectives were mostly in the areas of selling, general management, merchandising, and business ownership; 6) most lived in the community in which the school was located; 7) of the 644 students, 489 were employed part-time, mostly in retailing; and 8) weekly earnings averaged $43.38. Ball also made some comparison with data obtained on similar students during 1964.

Adult Distributive Education Curriculum Studies

Only three studies were located for this report that dealt with adult programs, and only one is specifically related to distributive education. This may be a weakness in distributive education research efforts since approximately 75 percent of the reported enrollments in distributive education are in adult programs. Tye (1966) reviewed the relevant literature in general adult education published since 1950 to identify process guidelines for program development. He identified 143 guidelines and arranged them under the six major headings of: 1) selecting objectives, 2) the relationship of objectives to learning experiences, 3) selecting and organizing learning experiences, 4) evaluation of the extent to which objectives have been achieved, 5) the relationship of selecting objectives to evaluation,

and 6) the relationship of selecting and organizing learning experiences to evaluation. Smith (1966) identified and validated objectives of public school adult education. He found the major goal to be general education for self-realization, with the second most important goal being occupational education for economic efficiency. To meet the second goal, it was recommended that adult educators be constantly aware of the emerging and declining employment opportunities. He also stated that goals and objectives are best formulated by the administrative staff in cooperation with an advisory committee and the board of education.

McGurk (1967) surveyed current practices of distributive adult education coordinators, and supervisors in organizing and conducting adult programs in Virginia and evaluated the resulting programs from the standpoint of selected enrollees. Some of the findings included the following: 1) Sixty-six percent of the coordinators in large programs and 21 percent of the coordinators in small programs stated they used advisory committees for planning and promoting adult classes; 2) Most used some form of state reimbursement to help finance the programs; 3) Almost all of the coordinators used personal contacts to promote enrollee registration; 4) Follow-up surveys are made of enrollees; and 5) Course outlines are used in most courses as teaching outlines.

EDUCATIONAL PROGRAMS

Relatively little of the research completed in the past three years is directly related to the establishment of distributive education programs on the high school, post-high school, or adult level. Programs for youth and adults with special needs have recently appeared in both in-school and out-of-school offerings. Few research efforts are associated with initiating such programs, but one research project of that nature has been reported and is reviewed in this section. The other studies reviewed in this section include two projects connected with in-school high school programs, two studies dealing with post-high school distributive education programs, and one study pertaining to marketing training in business establishments.

In-School Programs on the High School Level

As part of his study, Holloway (1967) investigated the operation of the Cooperative Vocational Education Program at Champaign Central High School, Champaign, Illinois. The program attempted to provide general vocational experiences rather than specific skill training and although the students were divided into subgroups which corresponded to traditional divisions, including distributive education, a team teaching approach was used for the related classroom activity. The program was open too all interested students in the senior high school. Holloway's primary objectives were to ascertain the characteristics of students who enrolled in the pro-

gram, to compare them with students who did not enter the program, and to determine whether the two groups differed appreciably at the end of the school year. His major findings and conclusions, therefore, are reported later in this review in the sections treating evaluation and student appraisal. He did conclude that general vocational development is of prime importance at the secondary level and that team teaching techniques have proven successful.

Carey (1967) surveyed the various patterns of organization and administrative practices in states either offering or planning to offer noncooperative, preparatory programs in distributive education at the high school level. He found that in most states instruction is directed primarily to eleventh and twelfth grade students, with the larger enrollments in the eleventh grade. Most states with established noncooperative programs do not have a separate project laboratory whereas half of the states preparing to implement programs will schedule a project laboratory. Carey noted that 23 different descriptive titles are used to identify the vocational noncooperative preparatory distributive education programs throughout the United States.

In-School Programs on the Post-High School Level

Though little research has been aimed at determining the status of post-high school distributive education programs in the past three years, a doctoral study by Moore (1966) attempted to determine the extent to which certain aspects of cooperative part-time distributive training meets established criteria in post-secondary school distributive education programs. Information was obtained from employers, trainee-graduates, and teacher coordinators by means of evaluation forms, personal visitations, interviews, and observations at selected schools and training stations. Five selected school communities were included in the study.

The major findings were the following:

1. Substantial accomplishment has been achieved in the area of aims and objectives; particularly in the areas of school-employer relationships, attitudes and promotions of graduates.
2. Evaluation of the effectiveness of the programs in developing vocational competency is complicated by the fact that about one-half of the graduates continue in school.
3. Post-secondary programs are organized and administered without direction of the state and federal vocational education agencies.
4. Coordination practices could be improved to better meet the needs of the community and industries.
5. The evaluation practices were found to be similar in the majority of programs studied.
6. The training stations' positions for post-secondary schools generally are mid-management or supervisory types.

7. In the area of knowledges and skills activities, it was found that most of the graduates received adequate training.

Defining and validating curriculum objectives of public community college business programs was one of the problems in a doctoral study completed by Griffitts (1967). Though he considered the broad field of business programs, the methodology used, as well as many of the findings and conclusions, are relevant to distributive education. Eight curriculum objectives were defined by the researcher, validated by a jury of prominent American educators, and submitted to the presidents and business department heads of 376 public community colleges. The respondents then marked the present degree of importance placed on each objective and the desired future importance of the objective in their institutions. Among the important findings were that transfer education was currently the most important objective of community colleges, that the retraining objective is becoming of increasing importance, that substantial disagreement exists on the importance of providing training for initial employability, now or in the future. Griffitts concluded that, in general, Texas public community college educators support the concept of the comprehensive community college, but that traditional educational and political philosophies pervading some institutions curtail seriously the comprehensiveness of the business curricula.

Training in Business Establishments

In the only study reported which dealt directly with marketing training in business establishments, Trickett (1967) tested the following three hypotheses: 1) Participation in an executive development program results in identifiable benefits as perceived by the participating executives; 2) Academically-oriented executive development programs have differentiable advantages over company-oriented executive development programs as perceived by the executive participants; and 3) Benefits of executive development programs as perceived by participating executives, are enduring.

The study was in three phases, the first of which was an evaluation of the Graduate School of Sales Management and Marketing, sponsored by Sales and Marketing Executives International. Phase two involved a questionnaire sent to sales executives randomly selected from companies widely dispersed throughout the United States. Phase three was an evaluation of the continuing effectiveness of development programs for executives.

All three of the hypotheses were found to be substantiated and tenable. However, relatively little enthusiasm was found for the company programs when they were compared with the academically-oriented programs. The research indicated that the participating executives had both the desire and the capacity for development and that the best qualified instructors were university faculty who communicated their knowledge from a background of business or business-consulting experience.

Programs for Students With Special Needs

The Vocational Act of 1963 provided opportunity for the development of vocational education programs for students with special needs. As programs of this nature become more prevalent, research will be needed for the establishment of program guidelines, the construction of predictive devices, and evaluation instruments. A research project, here reviewed, was undertaken by Groves (1966) who attempted to determine characteristics important to successful establishment and operation of vocational education programs for students with special needs. The study was national in scope but limited to programs operated in public high schools and supported in some part by federal vocational education funds. Instruments were prepared by the researcher to secure data on characteristics of existing programs and the respondents, who were teachers and administrators of the programs, were asked to rate the importance of 50 selected items related to planning and operating such programs. Seventy-nine schools in 24 states were included; the characteristics rated were from the general areas of administration, pupil personnel, curriculum, special services, and teacher personnel. There was high agreement between teachers and administrators on the relative importance of the items, of which 14 were rated as highly important. The need for further study was recognized in the following areas: 1) identification of methods by which vocational education could be of service to students with special needs, 2) identification of the kinds of students and the types of vocations which could be involved in these programs, 3) more detailed study in the five areas of this study, 4) determination of other efforts not funded by vocational education funds to provide for the needs of the disadvantaged, and 5) further perfection of the items developed in this study by evaluating present programs.

INSTRUCTIONAL MATERIALS AND DEVICES

The authors of this review feel that much of the effort of distributive educators in the broad area of instructional materials and devices was not reported for this project. Since some materials such as bibliographies, curriculum guides, and courses of study do not fit the more classical definition of research, directors of projects are reluctant to include these in a research inventory. The projects herein reported, therefore, should probably be considered only a partial list of projects of this nature which have been undertaken.

Meyer and Logan (1966) found that most of the studies involving instructional materials were master's degree studies. Studies included in this report, however, are not degree research, rather they are projects sponsored by federal or state departments of education. The wide variance in the nature of the nine reported studies which are reviewed in this section makes meaningful subgrouping very difficult. However, to provide some order to the discussion and since the majority of the projects are state or federally

sponsored, they will be grouped in terms of source of support—federal, state, or independent.

Studies Supported by the United States Office of Education

Two extensive bibliographies were prepared pursuant to contracts with the United States Department of Health, Education and Welfare, Office of Education. The one developed by Woolf and Pettit (1967) was a selected and annotated bibliography related to cooperative and project methods in distributive education. Designed as an aid not only to students but also to professional personnel in distributive education, it includes articles pertaining to the secondary school level, published from 1896 through 1967. The publication is divided into two main sections. Section I deals with literature relating to the cooperative method and Section II deals with the project method. Both of the sections are organized to provide a subject and author index, selected readings, and annotations. The bibliography completed by Levendowski (1968) was a compilation of audiovisual instructional materials for distributive education. The item descriptions, derived from information provided by distributor catalogues, are listed alphabetically in each of 14 instructional areas. A brief description of each item and an information code provide the source, grade level for which the item is appropriate, and cost. This effort by Levendowski is a continuation of his work in the area of classified bibliographies.

Ertel (1968) received support from the United States Office of Education to develop a retailing instructional system by which materials could be created to teach non-college bound youth the competencies necessary for entry level employment in the general merchandise retail field. He defined an instructional system as a "sequence of learning experiences through which each learner within a defined population moves at his own pace in order to demonstrate certain behavior which will meet defined criteria." The development of this instructional system was only one phase of a project designed to identify clusters of concepts and capabilities common to many vocations and to provide new approaches to teaching those competencies. The procedure followed was to state objectives in behavioral terms and then to design linear-style programmed instruction suitable to achievement of those objectives. A polysensory multi-media programmed instruction presentation was achieved by integrating concepts in written, audio, and visual styles. Prototype components of the system include 23 booklets of programmed instruction, and eight sound-slide films. Tests of these materials were scheduled for initial field trials by the Northwest Regional Education Laboratories late in 1968.

Ertel's work appears to be an important early step in developing the sort of "system" approach which many writers have commented on but for which little tangible results are apparent—particularly on educational levels lower than the executive or management training programs.

A similar concern for a multi-faceted approach to secondary level occupational education, but with an emphasis on dramatizing career occupational areas in distribution, prompted project NOTIFY (Needed Occupational Television Instruction for Youth). As part of this project Lawson and Bancroft (1967) constructed video tapes to feature seven occupational areas including food retailing, department store retailing, lodging and food service, and financial institutions. Entry level jobs were shown, along with career opportunities and the means to prepare for advancement in these occupational areas. To help determine the effectiveness of the materials developed through the project, a follow-up study was conducted in San Bernardino City High Schools which indicated that students, counselors, and principals considered video tapes as an effective means for disseminating occupational information.

Studies Supported by State Departments of Education

State departments of education continue to be active in the production of courses of study, handbooks, and curriculum guides. An example of this type of effort is the work done by the Vocational Curriculum and Development Center, Louisiana Department of Education. During the 1967-68 period they produced six conference leader guides for adult distributive education dealing with the content areas of advanced sales techniques, credits and collections, tour guides training, controlling retail losses, tourist courtesy and information, and banking services. The State of Washington sponsored the development of a handbook for supervisors of the disadvantaged, authored by Blue (1968). The major purpose of the handbook which was developed within the Division of Distributive Education, was to serve as a guide for conducting a seminar-type study of responsibilities and techniques performed by supervisors who work with employees classified as disadvantaged persons. Though identified as a distributive education instructional aid, the handbook is conceived and organized in a manner which makes it a useful guide to supervisors of handicapped employees in a wide range of occupations.

As previously indicated, the two projects just reviewed should not be construed as the total output of state departments of education in the way of instructional materials or in the research supporting the development of such materials. State departments of education are to be commended on their efforts, not only in the development of materials, but also in many other projects relating to distributive education, and they should be encouraged to make the results of their work known and available to distributive educators.

Independent or Degree Studies

Two of the bibliographies developed through the support of the United States Office of Education have been discussed. Two other bibliographic

studies were reported—one by Hirshfield and Sassman (1968) which was a compilation of articles encompassing the entire range of distributive education topics, and one by Fossum (1966) which included only instructional materials related to restaurant and hotel management. The bibliography by Hirshfield and Sassman included only articles published during the 1962-68 period. The study by Fossum was not currently available for review.

One textbook related study was reviewed, a doctoral dissertation by Spring (1967). Feeling that textbooks currently used in teaching non-textile merchandising to slow and average high school students were not suitable, he developed chapters with a controlled reading difficulty level and with built-in motivational devices designed to maintain student interest and encourage reader review.

The procedure was one of writing subject-matter chapters according to predetermined standards appropriate for slow and average learners, then measuring results against these standards. The author recommended that additional research be conducted in order to develop more refined methods for objectively rating textbook components.

It appears to the authors of this review that the surface has barely been scratched in terms of potential research relating to instructional materials and devices. The proliferation of innovative teaching media (including games, simulations, machines, programmed materials, computer assists, and other imaginative devices) calls for research activity to compare results, find most appropriate uses, and in general better appraise the contribution these devices can make to distributive education.

LEARNING PROCESS AND TEACHING METHODS

The area of methods for teaching distributive education subject matter continued to be an important research area. However, it was difficult to define exactly what is meant by research in learning processes and teaching methods. Very few studies could be classified as truly experimental studies.

A brief review was made of some readings outside the field of distributive education in order to give the reader an insight into what has been done in other fields. The area of media and technology has received considerable attention during the past decade. An excellent review of the literature pertaining to "Instructional Materials: Educational Media and Technology" was found in the *Review of Educational Research,* April, 1968. Literature was reviewed for the six-year period 1962-67. Saettler (1968) referred to media research as having a long research tradition and yet little relevance to instructional design. He attributed this to a serious lack of relevant theory pertaining to instruction as an operational base for a technology of instruction. Saettler also emphasized the need for a taxonomy of instructional media in order to provide a systematic approach to the selection and use of media for educational purposes.

The amount of research in the area of behavioral objectives has affected the kind of research done in relating educational objectives to educational media. Edling (1968) said it was important to obtain the responses of learners to each element in a specific instructional package to determine the congruence between educational objectives and educational media. He referred to five approaches that were currently being tried as methods of utilizing learner responses: 1) the error-rate approach associated with the early developments of programed instruction, 2) the counseling approach that utilizes an interview technique with individuals in small groups, 3) the diagnostic-criterion test approach that employs concepts identified in task or learning-set analysis, 4) the latency approach which indicated that a delay in responding to items was an effective means for identifying them, 5) the "black-out rate" approach to eliminate extraneous stimuli. Edling also pointed out that teachers' roles are somewhat poorly defined in terms of their responsibility for developing educational objectives and selecting appropriate learning experiences.

Householder (1968) was the author of a chapter in the *Review of Educational Research,* October, 1968, on techniques and modes of instruction in vocational, technical, and practical arts education. He reviewed selected studies done during the period 1962-67 that pertained to the use of television, programmed instruction, tape recordings, textbooks, multi-media devices, and other selected media. Householder stated that the effectiveness of the various media for instruction in vocational education has not been determined through the use of appropriate research and study. There is too much contradictory evidence. The problem becomes more perplexing as the variety and style of educational media increases. Householder also reviewed the research done in arrangement of content and organization of learning experiences, as well as in the area of learning outcomes.

Learner Characteristics

Although little research was completed during 1966-68 on learner characteristics, studies were conducted by two graduate students at Kansas State Teachers College, Emporia, Kansas. Estes (1968) attempted to determine if there was a difference between the students enrolled in distributive education and the population of their senior classes in regard to ability and achievement. He found: 1) no significant difference between grade point averages observed and grade point averages expected, 2) no significant difference in Lorge-Thorndike test scores, 3) no significant difference in Differential-Aptitude scores, and 4) no significant difference in test scores for distributive education students (seniors) for the years 1968 and 1969. His general conclusion was that the distributive education students of 1968 and 1969 at Dodge City Senior High School were not different from the rest of their classes in regard to their ability and achievement. Stark (1966) did a similar comparison of the distributive education classes and the respective senior classes for the years 1962 and 1965 in Leavenworth,

Kansas. His findings were similar to those of Estes, except that the distributive education students were lower on the verbal battery of the Lorge-Thorndike Intelligence Test and higher on the Clerical Speed and Accuracy part of the Differential Aptitude Test. His general conclusion was that the distributive education students were not different from the rest of their classes in regard to ability and achievement.

A study by Ball (1967) was reported earlier in which he described the characteristics of post-secondary distributive education students.

Sethney (1967) found that most of the persons who had been selected as student of the year by National DECA enrolled in the distributive education program because of an interest in marketing and distribution and to obtain work experience. Most of these students also expressed a desire to go on to college.

Resource Characteristics

The occupational environment in which distributive education students are employed under supervision should still be considered as a prime source of learning materials and suggestions for teaching. This is true for students enrolled under the cooperative plan as well as the project plan. The recent emphasis on competencies for distributive workers should result in increased emphasis on individualized study, even though the research completed during the last three years does not reflect this emphasis. Wallace (1969), for example, recommended effective and appropriate instructional resources for use in the project plan of instruction, such as simulations and projects.

It should not be overlooked that the adult distributive education programs can serve as a rich source of material and ideas that can be beneficial in high school and post-high school programs. Adult instruction is directly related to the employment situation, permitting utilization of job situations to formulate content and teaching procedures.

Business Games

Only one study was located that dealt with business games. Massey (1967) reported an examination of the more realistic simulation models and an analysis of resources necessary to implement the development and use of such models. His study covered use of games at the collegiate level, and he attempted to describe the difference between "game theory," "management games," and "simulations." Massey developed a simulation model from existing models and found the students reacted realistically to models in an experimental situation. He also found the students had a greater appreciation of the significant factors involved in the decision-making process.

Case Problems

Two studies were reviewed in which case problems were constructed and tried out in distributive education classes. Warner (1968) developed a set of case problems in distributive content areas by utilizing critical incidents in which effective and ineffective behaviors of distributive workers were described. The cases were presented in two parts. The students were presented with information and asked to formulate alternative courses of action, followed by stating a specific course of action. The next step was to present additional information and have the students determine if this would cause them to change their original decision. Three groups of students completed the case problems and reacted favorably to this procedure. Warner also obtained the opinions of several coordinators on presenting two-part cases. Their reactions were favorable.

Skare (1967) attempted to improve instruction in agricultural supplies and machinery retailing through the development of a set of case problems that were related to subject matter content units in retailing. He interviewed retailers and representatives of processors and suppliers to obtain information for the content of the cases. Skare stated the desired outcomes for each case, the content of the case, and also suggested ways to test achievement after students had participated in discussing the case. The case problems were tested by instructors in agriculturally related programs at four schools. He found that: 1) students become personally involved in case problems; 2) students can apply previously learned facts and theories; 3) case problems contribute to improved adjustment and group work skills; and 4) students experience some frustration when first confronted with case probelms as the teacher does not exercise a typical leadership role. Skare also suggested that case problems are not effective in imparting new facts or knowledge, but should be used to complement other teaching methods.

Club Resources

Even though club activities receive a great deal of attention and publicity, there were no studies located that dealt specifically with clubs as such. Bush (1966) found that all programs surveyed in the State of Indiana were affiliated with the Distributive Education Clubs of America. The most important club activities were ranked as: 1) employer-employee banquet, 2) contests, 3) National Leadership Conference, 4) field trips, and 5) regular meetings. The least important were: 1) follow-up studies, 2) National DECA week, and 3) the installation of officers.

Sethney (1967) found in her survey of National Student of the Year contest winners that they were outstanding in their leadership and participation in DECA activities, as well as in other school activities. Perhaps this was to be expected since the criteria for winning this event included leadership and participation in club activities.

Teacher Characteristics

There continued to be considerable research in the area of teacher characteristics and teacher-coordinator qualifications. It has generally been accepted that the qualified person needs a certain amount of occupational experience in marketing and distribution, professional preparation in the technical content, and adequate preparation in professional education in order to be considered competent and certifiable as a teacher-coordinator. This has been accepted in spite of the fact that there are no measures of teaching effectiveness agreed upon by personnel in distributive education and that certification requirements vary considerably from state to state.

Certification Requirements

One study dealt exclusively with the certification requirements for post-secondary distributive education coordinators. Perryman (1967) compared the certification requirements of post-high school distributive education teacher-coordinators as they existed in 33 states with the recommendations of the U.S. Office of Education. A summary of the findings included the following: 1) fourteen states requested the teacher-coordinator to have a state certificate; 2) there was no close relationship between the various states or the USOE regarding minimum degree requirements; 3) seventeen states required the master's degree as opposed to 14 that would accept the bachelor's degree; 4) there was no general agreement regarding the areas of preparation or the background of the coordinators; 5) semester hours of teacher education required varied from a high of 36 to a low of 6; and 6) states that required higher standards seemed to have produced a more adequate supply of teachers. It was also noted that certification requirements in most states included four major things: 1) amount of preparation, 2) work experience in distributive occupations, 3) amount of preparation in professional education, and 4) amount of subject matter specialization. Perryman concluded that the recommendations of the U.S. Office of Education are not necessarily followed by the states, and that there was little uniformity among the states regarding certification requirements for post-secondary distributive education teacher-coordinators.

Personal Characteristics

Bush (1967) found that a large proportion of teacher-coordinators in Indiana were male, under age 40, had earned the master's degree, had considerable experience in distribution, and had taught business education subjects prior to becoming distributive education coordinators. Beecher (1967) established profiles of business teachers in Wisconsin schools of vocational, technical, and adult education, which included the marketing teacher. He found that 68 percent of the marketing teachers had sales experience. He felt this percentage should be larger.

Olson (1967) conducted an interesting study to determine the relationships between certain personality characteristics of distributive education teacher-coordinators and job satisfaction. He used *Cattell's Sixteen Personality Factor Questionnaire—Form A,* and the *Minnesota Satisfaction Questionnaire* with 88 teacher-coordinators in Minnesota and Iowa. Twenty-three personality dimensions as measured by the 16 P.F. were used as independent, predictor variables. Twenty-one job satisfaction dimensions as measured by the M.S.Q. were used as dependent, criterion variables. Twenty-eight coordinators' questionnaires were selected to cross-validate the data on 60 coordinators. Olson found that the scores on the 16 P.F. indicated the coordinators were outgoing, intelligent, surgent, venturesome, conventional, extroverted, group-dependent, and leaders. Their M.S.Q. scores indicated satisfaction with achievement, activity, creativity, independence, moral values, responsibility, security, social service, and variety. Dissatisfaction was expressed with advancement, compensation, recognition, school policies, and procedures, social status, supervision-human relations and technical, and general working conditions. The correlation and regression analyses showed 17 personality variables which contributed to the prediction of six satisfaction dimensions. Cross-validation of the 21 regression equations on the group of 28 randomly selected coordinators resulted in correlations so small as to indicate no significant relationship between the predicted scores on job satisfaction and the actual scores obtained on the M.S.Q.

White (1968) investigated the nature of distributive education teacher-coordinators in terms of their values and attitudes as compared to two groups of potential distributive education teacher-coordinators—undergraduate business administration students and selected business employees. He used the Allport-Vernon-Lindzey *Study of Values* to measure values such as theoretical, economic, aesthetic, social, political, and religious. The *Minnesota Teacher Attitude Inventory* was used to measure attitudes. He concluded that the values held by distributive education teacher-coordinators were similar to those of undergraduate business administration students and business employees. In terms of mean scores, the teacher-coordinators had higher economic, social, and religious values. On a profile chart, however, the value patterns of all three groups were roughly congruent. The values and attitudes toward teaching of the distributive education teacher-coordinators were similar regardless of their backgrounds prior to entering distributive education. White also concluded that undergraduate students majoring in business administration and selected business employees were worthwhile sources for recruiting distributive education teacher-coordinators.

Instructional Methodology

Most of the research done during the past three years pertained to methodology regarding the project plan of instruction. This is probably due

to the fact that this approach added a new dimension to the distributive education instructional program. Prior to this time, the cooperative plan received most emphasis. This does not mean the cooperative method is being de-emphasized. There seems to be more effort to relate and integrate the project and cooperative methods.

Project Method

Beima (1968) designed an evaluative tool (checklist) for selecting projects with potential for teaching occupational competency by the project method in Alaska. He reviewed the literature and proceedings of several national seminars and workshops to obtain data for constructing the checklist. Copies of the checklist were sent to teacher-coordinators and specialists to obtain suggestions for refinement. The refined checklist was then used to evaluate 10 distributive education projects. Beima's findings indicated that the checklist had value in judging the training potential of a project, and could be used by teachers as a guide in developing their own projects.

Coakley (1968) described the high school distributive education student's reaction to experiences provided through projects and project training. He concluded that: 1) projects gave students a better understanding for working in marketing and distribution; 2) the projects were well-managed by the teachers; 3) student attitudes toward the content learned regarding competencies were favorable; 4) the most effective projects were those in which there was much student involvement; and 5) projects should be related to classroom instruction and the occupational interest of the student.

Ferguson (1967) conducted two studies regarding the project method. The first was a research paper that included an edited collection of tape-recorded comments and reactions to project training that was carried out at 17 clinical sites in Michigan high schools. The paper included comments on the best points of project training, as well as the problem areas of project training. The second was a doctoral study designed to compare the effectiveness of the project and cooperative methods of teaching high school distributive education in teaching two competencies, economic understandings, and sales comprehension. He also considered the socioeconomic backgrounds of the students, their age, sex, and prior achievement, as well as, the attitudes of the teachers. The sample consisted of 733 students in 10 Michigan high schools. Four groups of students were included: 1) an eleventh grade project method distributive education class, 2) an eleventh grade English or social science control class, 3) a twelfth grade cooperative method distributive education class, and 4) a twelfth grade English or social science control class. Ferguson found that the nondistributive education groups performed as well as or better than the two distributive education groups on the tests of economic understanding and sales comprehension; however, the cooperative method classes scored higher on sales comprehension than did the project method classes. He found a positive correlation between prior student achievement and test scores of economic under-

standing and sales comprehension. Also found was no significant correlation between students' socioeconomic status, age, sex, or teacher's attitudes.

Samson (1967), assisted by Rush, was the director for a national workshop that was held on two campuses, Rutgers—The State University, and the University of Wisconsin. The major purpose of the workshop was to provide selected participants an opportunity in identifying, planning, developing, and implementing the project method in distributive education. The final report included several working papers along with a large number of projects that were developed by the participants. The workshop was the first national attempt to develop materials specifically for project training in distributive education.

Individual Study

Roberson (1967) compared the relative effectiveness of teaching specific related information in distributive education by individual self-instruction with that of teaching by a combination of teacher lectures and class discussions. This was an experimental study involving eight senior high school distributive education classes with a total of 187 students. Two different specific related information units of instruction were taught by the investigator using each method. Outcomes were measured in terms of informational achievement and the effort, time, and costs involved. He found no significant difference in informational achievement between the groups, and that the lecture-discussion took more time. However, it took longer to prepare the individual study materials than the lecture materials, and the individual study materials cost more. It was generally concluded that students taught by individual study could learn just as well as students taught by the lecture-discussion method, but in a shorter period of time.

Programmed Instruction

Trimpe and Dannenberg (1966) attempted to determine the value of specialized programmed instruction as a tool for improving the expressed career objectives of high school distributive education students, particularly regarding attitude changes toward a career in food distribution. A linear program was provided for 92 high school distributive education students who were working in retail food markets. One group received regular classroom instruction and had access to the programmed materials, while the second group received only the regular classroom instruction. Five techniques were used to measure results. It was found that a majority started with an unfavorable attitude toward a career in retail food distribution, and the programmed information seemed to reinforce these negative attitudes. The students realized a relatively small net gain in knowledge concerning the food industry, but open-minded students thought more favorably of working in a retail food market than did closed-minded students. It seemed to be indicated in the study that students need to be placed in jobs more in line with their career goals.

STUDENT PERSONNEL SERVICES

A particularly difficult task when reviewing research related to a single educational field such as distributive education is to decide which particular research projects are closely enough "related" to justify inclusion. This task is doubly difficult in dealing with a topic such as student personnel services, since virtually all research relating to student appraisal, guidance, occupational information, placement, and follow-up has aspects relevant to both the purpose and procedure of distributive education cooperative programs. The authors of this review may have erred in many instances by not including some relevant studies, but to include all was obviously impossible.

The delineation of responsibilities and the organizational arrangement to serve the total student personnel function vary greatly with the type of institution and the level of student served. At one end of the scale is the large comprehensive high school with highly organized and well-staffed student personnel departments to which distributive education coordinators can turn for assistance. At the other end of the scale are some of the area technical schools or adult education programs where student personnel services are extremely limited and the distributive education coordinator himself must assume major responsibilities. Studies are needed to ascertain the student personnel services necessary to serve distributive education students effectively at all levels and in all types of institutions as well as to evaluate existing guidance services. One such study by Bottoms (1965) did attempt to determine the need for and extent of student personnel services in Georgia Area Vocational Schools. This study did not limit itself to distributive education programs or students but included all vocational programs enrolling both day and evening students in 15 participating schools.The findings of the study generally support the conclusion that performance of personnel services has been inadequate and has not met the needs of students in vocational-technical schools. The response to the questionnaire instruments by administrators, faculty members, and students identified the following inadequacies:

1. The area schools have not developed systematic and positive media through which to work with the surrounding high schools.
2. The admissions program provided in area schools seems inconsistent.
3. The personnel record system used by area schools is inadequate and inconsistent.
4. The area schools need an organized orientation program.
5. The area schools have little or no information materials concerning the world of work and personal and social adjustment.
6. The area schools have made little or no provision for counseling, job placement, and follow-up services.
7. All services were being performed less adequately in smaller schools, in night programs, and in schools without a counselor.

The greatest number of studies pertaining to the general area of student personnel services were those involving the dissemination of occupational information. Of the 17 studies included in this section of the review, eight seemed to be primarily of that type. Three studies dealt with problems of appraisal and selection of students, one with placement activities and four pertain generally to the problem of work adjustment and job satisfaction.

Appraisal and Selection

If distributive education programs are designed to prepare interested and qualified students for employment in marketing occupations, it seems reasonable to ask, "Who are these interested students, and what characteristics do or should they possess?" Ball (1967) attempted to shed some light on these questions by doing a descriptive study of the characteristics of distributive education students enrolled in 15 post-secondary vocational, technical, and adult education institutions in the State of Wisconsin during the spring of 1966. The specific findings of Ball's study—some of which were discussed earlier in this review—are of less importance than the purposes for which it was undertaken. These were: 1) to provide useful information to coordinators who are charged with the task of matching future trained employees with community needs; 2) to provide a better understanding of student previous work experience, occupational objectives and family background in order to facilitate more effective communication with them; and 3) to add to the knowledge about students who will be preparing for occupations in distribution so that their programs may be better planned. Ball poses a number of unanswered questions for which further research concerning student characteristics is needed.

To aid in the selection and guidance of prospective distributive education work experience students, Price (1967) used a case study method to identify general characteristics of successful retail workers who had been enrolled in the distributive education courses and who had received a high school diploma. Criteria for success included a record of promotion and an unequivocally positive evaluation by their managers. Clinical interpretations of the information obtained indicated some consistent patterns, particularly in terms of job satisfaction, personal and social adjustment, and intellectual ability. A very interesting result was the indication that early experience in the retailing field appeared to have a beneficial impact on the individual. Of particular pertinence was that the early experience was acquired prior to the subject's entering the distributive education program. The author suggested that this opportunity for experience be capitalized on to facilitate the development of interests and the selection of students prior to entering a distributive education program.

Two studies reviewed—one high school level and one post-high school level—looked at distributive education student characteristics, but with a primary purpose of comparing distributive education and nondistributive education students. The study by Estes (1968) used samples from senior high school classes at Dodge City, Kansas, whereas the study by Larson (1967) in-

volved students from the post-high Retailing and Selling Program of the General College of the University of Minnesota. In both studies the general conclusions were that no significant differences existed between distributive education and nondistributive education students when compared on the basis of academic aptitude and achievement. Studies such as these, limited though they may be, suggested the possibility of flaws in some time-honored beliefs about comparative abilities and performance of vocational and nonvocational students. In addition the sentiments so often expressed by distributive educators concerning the importance of proper appraisal and selection of enrollees for distributive education programs, seem reason enough to encourage more research effort on these topics.

Occupational Information and its Dissemination

Studies reviewed which relate to some aspect of occupational information are varied in nature. The identification of characteristics of successful distributive workers, attitudinal studies about careers in distribution, and surveys concerning educational backgrounds of people in high level marketing positions comprise the bulk of research efforts during the past three years. There appeared to be less emphasis on studies merely describing occupations than was true previously.

Three studies dealt with attitudes, opinions, or concepts concerning vocational careers, but the purpose of each study was different and only one of these three directly focused on distributive occupations. That one, a master's study completed by Piacenza (1968), investigated the attitudes and opinions of the personnel directors of selected Chicago metropolitan area retail firms, and selected Illinois college educators concerning executive careers in retailing. His findings tend to support those of other investigators, that retail marketing careers offer potentially rapid advancement and high salary, but low starting salary, long and broken hours, and heavy pressure. It was also the opinion of respondents in his study that marketing and general business courses are more important than general education courses and that retail firms are attracting fewer college graduates than other industries.

Two other studies reviewed were not directly related to careers in distribution but had interesting implications for those educators concerned about attitudes toward occupations. Beasley (1967) investigated the relationship of race, sex, intelligence, and socioeconomic status to attitudes toward certain types of occupations and occupational dimensions. The sample for his study was drawn from junior high school students in the Tacoma, Washington School District. He found that the Negro group and the Caucasian group differed significantly with respect to what factors were most important in their getting desired jobs. It appeared that, other things being equal, Caucasians perceived choice of an occupation largely as a matter of their personal preference, whereas Negroes attributed a relatively large importance to factors over which they have little control. In general, it appeared from this study that factors of race, sex, intelligence, and socio-

economic status have important effects on attitudes toward and perceptions of jobs.

A study of the concepts and generalizations which high school vocational students have toward the world of work was an aspect of a doctoral dissertation by Whatley (1967). She developed a framework within which various influences upon the individual in the work situation could be classified as personal, environmental, or combined personal-environmental, and concluded that such a framework could help orient youth to employment.

An area of study that has received considerable attention over the years has been that of investigating the background of people employed in sales or marketing jobs, particularly those considered to be successful employees. Studies of this type serve a variety of purposes, some of which are mainly to assist in the career guidance of students. The information obtained can often provide a better understanding of attitudes and aptitudes associated with effective performance in marketing occupations. On the other hand, studies of this type may be primarily designed to aid in curriculum construction by identifying areas of subject matter which are extremely important, or for which experienced marketing personnel feel inadequate attention has been given. Whatever the specific purpose of the study, however, it involves the collection and dissemination of information related to the occupations for which specific educational programs are undertaken.

Vizza (1967) and Christianson (1967) both conducted studies aimed at analyzing the educational and occupational training background of sales and marketing executives. An additional dimension of Vizza's project was to survey the opinions of sales executives regarding educational and training requirements for people seeking similar positions in the 1980's. His study drew an educational profile of the respondents as having a bachelor's degree but not with a major in business administration, little formal management training, little graduate education, and strongly in favor of professional education, as opposed to liberal arts education, for future industrial sales representatives. The respondents also charged the colleges with the major responsibility for the continuing education of executives. An interesting bit of information from this study was the importance that the respondents placed on collegiate schools of business and business courses even though the majority of them were nonbusiness majors.

Where similar information was sought, the findings of Christianson tend to support those of Vizza. A major purpose of the questionnaire Christianson sent to members of the Racine, Wisconsin Sales and Marketing Club was to determine if there was a common factor or combination of factors leading to their choice of marketing as a career. A summary of his major findings are as follows:

1. The respondents were able to progress to an executive position by remaining with one company for a period of years.
2. In most cases, the employment of the respondents' fathers did not have a direct positive influence on the sons in their choice of a career.

3. Substantial experience in other jobs precede acquiring their present executive positions.
4. Actual marketing experience, regardless of occupational level, was deemed very beneficial to marketing career development. Non-marketing occupations were of little benefit.
5. One-third of the respondents had obtained initial marketing occupations before making a career choice.
6. Seventy percent chose a career in marketing primarily because of the work characteristics it provided.
7. The majority of the respondents were "people" rather than "things" oriented.
8. Most of the respondents considered the challenge of their work as the most appealing aspect of their present jobs.
9. The respondents indicated a high degree of job satisfaction.
10. The median respondent had 16 years of schooling.
11. While very few respondents majored in marketing, business courses were considered most helpful to career development.
12. A high degree of career choice satisfaction existed.

The problem of systematically gathering, storing, and making occupational information available was the subject of a master's degree research project by Lundell (1968). Using data gathered from distributive education training programs in Minnesota, he established a data bank containing 32 areas of information which could be immediately and currently accessible for longitudinal follow-up studies. A computer program was then developed so that data could be easily added to the data bank and could be quickly obtained, when needed, for various types of studies.

The Placement Function

Meyer and Logan (1966) reported a considerable number of studies which dealt with the teacher coordinator's role in placement and the selection of training stations. Two studies which were reported for the present review attempted to determine what qualifications employers looked for in hiring employees for retailing and other sales positions. Kameh (1966) designed and administered a questionnaire to personnel directors of 60 stores from the Richmond, Virginia area. In addition, he selected a sample of employees whom he interviewed personally to determine their reaction to the training program of the store. He found that aptitude tests were employed by over half the stores in screening applicants, that a high school diploma was usually required for a selling position, and that applicants with previous work experience were given special attention during the training program. Piacenza (1968), in a study referred to earlier during the discussion of occupational information, also attempted to determine the practices of selected retail firms in the Chicago metropolitan area in recruiting college graduates for their executive training program.

Findings relevant to this aspect of his project indicated that personnel directors obtained most of their executive trainees from colleges and universities and that they considered contacts with counselors and placement directors as the most productive promotional activity in executive recruitment.

In light of the importance that distributive education coordinators attribute to good placement of cooperative students as well as graduates of programs, it appears that much more research effort could be expended in this direction, particularly in attempting to determine what constitutes "good" placement.

Work Adjustment and Job Satisfaction

An increased emphasis was noticed by the authors of this review in the general area of investigating and measuring the work adjustment of distributive employees and the level of job satisfaction achieved. Although general attempts to evaluate satisfaction by questionnaire items or interviews has long been a part of research projects in occupational education, more formal evaluations are possibly more numerous now with the refinement and development of measurement techniques. Several studies recently completed at the University of Minnesota included aspects of job satisfaction. One by Klaurens (1967) had as its primary purpose the identification of factors in the occupational experiences of cooperative distributive education trainees that are associated with job satisfaction and job dissatisfaction. In addition, she attempted to determine how job satisfaction and job dissatisfaction affect the student-trainees' perceptions of: 1) changes in job performance, 2) changes in attitudes toward the occupation in which they are employed and toward the firms which employ them, 3) changes in their interpersonal relations, 4) changes in their emotional adjustment, 5) changes in their career plans, and 6) their decisions to continue or leave their present positions. The technique used was to interview student-trainees from distributive education classes to collect sequences of events which the respondents associated with times when they experienced satisfaction and dissatisfaction on their jobs.

Her major findings were as follows:

1. The five factors most frequently associated with satisfaction were: Recognition, Achievement, Responsibility, Interpersonal Relations-Supervisor, and Interpersonal Relations-Co-workers.
2. The psychological meanings most frequently given to satisfaction sequences were: Possible Growth, Work Itself, and Achievement.
3. The factors most frequently associated with dissatisfaction were: Achievement (failure), Interpersonal Relations-Supervisor, Working Conditions, and Interpersonal Relations-Co-workers.
4. The psychological meanings most frequently given to dissatisfaction sequences were: Unfairness and Achievement.

5. Satisfaction sequences of events, as contrasted with dissatisfaction sequences of events (a) resulted in more feelings of long duration; (b) were considered more critical to feelings about the job; and (c) resulted in more perceived changes in job performance, interpersonal relations, and in attitudes toward the occupation, career, and the firm.

In an associated study dealing with job satisfaction, Stolhanske (1968) used the *Minnesota Importance Questionnaire* to measure the importance student-trainees attached to various vocational needs. He then tried to establish a relationship between the student-trainee's job satisfaction (or dissatisfaction) as measured by the *Minnesota Satisfaction Questionnaire* and the importance he attached to these various vocational needs. His sample was comprised of students from three types of cooperative vocational education programs—distributive, office, and trade and industrial. The division of the students into two groups, those satisfied and those dissatisfied with their employment provided the framework for comparisons. The distributive education students showed significant differences between the satisfied and dissatisfied groups on six needs; they were: compensation, social studies, supervision-human relations, supervision-technical, recognition, and social service. The satisfied group showed a stronger need for social service, supervision-human relations, and supervision-technical, while the dissatisfied group showed a stronger need for the others.

Three variables were significantly different with the office education group. The satisfied office education students attached more importance to moral values and supervision-technical while the dissatisfied students attached more importance to variety.

None of the variables were significantly different with the trade and industrial education group.

When the satisfied student trainees were compared among the three vocational groups, six variables were significantly different. Distributive education students attached more importance to creativity, responsibility, and authority than did the other two groups. Office education students attached more importance to company policies and practices, co-workers, and moral values than did the other groups. Trade and industrial education students did not attach more importance to any of the variables.

Larson (1967), in a post-high school comparative study discussed earlier in this report, did not find any significant differences between former distributive education and nondistributive education students when administered the *Minnesota Satisfaction Questionnaire* short form. In another study employing the *Minnesota Satisfaction Questionnaire,* Olson (1967) used the instrument to measure job satisfaction of distributive education teacher-coordinators. His findings were reported earlier in this review.

All of the studies dealing with job satisfaction have as concomitant the concept of work adjustment. One study by Garbin *et al.* (1967) was directly aimed at problems of students in their adjustment to work. He queried vocational educators to get their perceptions of attitudes, values, behavior

patterns, and situations that were problems to youth in adjusting to their work. He found that a large number of youths have unrealistic aspirations and expectations as to the requirements and rewards of their initial jobs. The educators felt that the common problems of work adjustment—indifference, laziness, carelessness, and lack of accepting responsibility—occur when perceptions of role functions are not congruent with reality. The vocational educators suggested that part-time work could assist youth in making the transition from high school to work.

In concluding the review of research related too the various student personnel functions, the authors are pleased that this area, so important to the effective operation of distributive education in all forms, and at all levels, is receiving a good deal of research attention. Furthermore, it appears that new types of studies and new research procedures, together with the use of refined instruments, are being employed in seeking answers to problems associated with selecting, guiding, and placing distributive education students and graduates. Distributive educators and researchers should keep in mind that a large number of important studies that relate to student personnel services are being conducted in other vocational fields as well as in educational and occupational psychology. Much of this research effort in other related areas has important implications for distributive education.

TEACHER EDUCATION

An increasing number of colleges and universities have established teacher education programs in distributive education, hence an increase in the number of teacher educators. The fact that there are more teacher educators has had an impact on the kind and amount of research carried out in the field. It seems evident that an even greater impact will be made in the years ahead as more graduate students become available to pursue studies, and as more professionals in the field undertake scholarly work as part of their faculty responsibilities.

The Role of Teacher Education and Teacher Educators

Duties and Responsibilities

The role of teacher education and teacher educators continued to be dynamic in nature, but still somewhat unclarified. It was evident that there was a lack of uniformity as to the emphasis that should be placed on various duties and responsibilities. Role clarification is greatly needed in terms of responsibilities for undergraduate and graduate education, pre-service and in-service education, teaching, research, counseling and advising, writing, working with state departments of education, recruitment, and follow-up of graduates. There are many issues that still need to be resolved.

Nye (1967) identified major issues in distributive education and obtained opinions of leaders in distributive education in regard to these major issues. He indicated that additional thought should be given to the contractual

agreements between state departments of education and institutions of higher learning for the development and operation of the teacher education program with specific attention to obtaining agreement on the functions of the program and the duties and responsibilities to be assumed by the teacher educator. There was a lack of agreement as to who should have the responsibility for determining professional certification requirements and work experience requirements for teacher-coordinators as well as to who should be the final authority in designating approval of certification. Nye found that teacher educators' duties and responsibilities involved more than just teaching courses, and that the professional responsibilities such as writing and consulting needed to be clarified. Nye concluded that a cooperative working relationship between the university and the state department of education would be highly desirable in providing an effective distributive teacher education program.

Tisdale (1969) included material in her paper that traced the history of distributive teacher education. She also discussed several approaches and procedures evident in carrying out the functions of teacher education. A list of 34 institutions of higher education was included which had started distributive teacher programs during the years 1960-67.

Recruitment

The need for qualified and certifiable teacher-coordinators was reflected in the research done to attract capable persons into teacher education programs. Hensel (1967) conducted a study to explore the potential of obtaining future teachers of vocational-technical education from the numbers of persons who are separated from military service. His sample included 1,152 persons of whom 27 percent were interested in teaching, 42 percent had completed course work in some phase of technical, trade, and industrial education, and nine percent were considered as outstanding prospects. However, very few had course work or occupational experience in the distributive field. Traicoff (1967) designed a study to determine what the high school business teachers and senior and graduate business education majors knew about distributive education, and their opinions of the field. He found these persons generally lacked accurate, up-to-date information about distributive education, and that they had received little encouragement or discouragement regarding entering teaching in distributive education. He recommended an expanded educational and recruitment program aimed at these persons as potential distributive education teachers.

Belding (1968) investigated various recruitment procedures as a basis for planning and implementing such a program at the University of Georgia. She prepared posters, brochures, supplementary materials, and slides with an accompanying tape that could be used with selected groups. She tested the materials and evaluated the outcomes of the program with favorable results.

Pre-Service Teacher Education Curriculums

Some interesting research has been done, and other research is continuing, that should be valuable in structuring the pre-service teacher education program. There seemed to be more emphasis on the individual and his needs in pursuing a teaching career than on specific programs. Perhaps this is desirable in light of the fact that a person should be satisfied in his work as a teacher, committed to the field and to students, and satisfactory to administrators and other staff members in a school system.

Desired Behaviors of Distributive Occupations Personnel

Meyer and Logan (1966) felt the desired behaviors of distributive occupations personnel could serve as clues to the needed behaviors that should be developed in a distributive teacher education program. Several studies were reported earlier that identified tasks, characteristics, abilities, and attitudes appropriate for success in distribution. Such studies were done by Ertel (1966), Peterburs (1967), Sheeks (1968), Van Blois (1968), and Crawford (1967).

Desired Behaviors of Teacher-Coordinators

There was one notable study that dealt with the critical tasks in the job of a teacher-coordinator. Crawford (1967), in Volume I, listed 179 critical tasks performed by the teacher-coordinator that were in line with the basic philosophy. Agreement was reached by selected distributive education state supervisors, assistant state supervisors, and teacher educators on the 179 critical tasks, as well as 233 professional teaching competencies. The competencies were grouped around the job functions of: 1) teaching, 2) guidance, 3) coordination, 4) public relations, and 5) operation and administration. Technical teaching competencies (subject matter know-how) were grouped according to: 1) advertising, 2) communications, 3) display, 4) human relations, 5) mathematics, 6) merchandising, 7) product and service knowledge, 8) operations and management, and 9) selling. In addition, she evaluated a set of concepts and generalizations concerning marketing and economic understandings. Phase II of Crawford's work (1968) was designed to construct educational objectives which would help in developing the professional and technical competencies needed by the distributive education teacher-coordinator. A tentative list of educational objectives was constructed and 10 consultants were asked to validate the objectives. Phase III (1969) consisted of conducting a national seminar to disseminate the findings of Phase I, obtain reactions to Phase II, develop guidelines for selecting learning experiences to accomplish the objectives, develop suggestions for evaluation, identify some guidelines for organizing a distributive teacher education curriculum, and investigate possibilities for further research based on the findings presented to the seminar. Phase IV is proposed to consider a four-step plan for constructing a distributive teacher education curriculum.

Brown (1967) worked under the guidance of Crawford to construct educational objectives that would assure the development of professional teaching competencies needed by distributive education teacher-coordinators, and classified the objectives into the cognitive domain. He constructed a list of 108 educational objectives that could be classified in the cognitive domain. A study mentioned earlier by White (1968) was designed to investigate the values and attitudes of teacher-coordinators as compared to two groups of potential teacher-coordinators. He found teacher-coordinators had high economic and religious values. Wallace (1969) stated that teachers needed adequate training in order to effectively undertake project training with their students.

Teacher Satisfaction-Dissatisfaction

An increased amount of attention has been given to determining job satisfaction on the part of the teacher in much the same way as it has been done in an industrial setting by Herzberg (1959) and his associates as reported in their book *The Motivation to Work*. A study was conducted by E. D. Johnson (1967) in which he attempted to identify the factors associated with high and low job satisfaction of elementary and secondary school teachers in a county in Georgia. Five factors were found that affected teacher satisfaction—achievement, interpersonal relations, recognition, work itself, and responsibility. Four factors affected teacher dissatisfaction—policy and administration, working conditions, status and personal life. Johnson implied that professional educators should concern themselves with the motivating factors listed above; it seems evident these same factors have implications for teacher education.

Olson (1967) was the only person to obtain measures of satisfaction for distributive education teacher-coordinators. His findings were somewhat similar to those of Johnson. Teacher-coordinators indicated satisfaction with achievement, activity, creativity, independence, moral values, responsibility, security, social service, and variety. Dissatisfaction was expressed with advancement, compensation, recognition, school policies and practices, social status, supervision-human relations and technical, and general working conditions. Olson also compared scores on *Cattell's Sixteen Personality Factor Questionnaire - Form A* and the *Minnesota Satisfaction Questionnaire.* He found that scores on the 16 P.F. could serve as predictor variables for some of the dimensions on the M.S.Q.

Student Teaching

Three studies were reviewed from outside the field of distributive education only to indicate some areas that may stimulate research in the field. Kerber (1967) used portable video tape recordings of elementary student teachers as a means to supervise, analyze, and provide feedback on teacher performance. He found students reacted favorably to the procedure, gained insight into their own teaching behavior, and seemed to become more

critical and analytical of the teaching behaviors of other teachers as well as their own behaviors. Cabianca (1967) conducted a study to determine the effects of a T-Group laboratory experience on level of self-esteem, personal needs, and attitude toward students of student teachers. Students exposed to T-Group experience showed a lower need for aggression and autonomy and a higher need for deference than did the control group. The student teachers reflected a positive attitude toward the experience, particularly in terms of learnings regarding self and attitudes toward others. Ford (1967) determined the most characteristic problems of student teachers in business education. She found that problems were viewed and rated differently by student teachers, cooperating teachers, and special supervisors. She did find that motivation was the problem area of most concern to all three groups.

In-Service Teacher Education Studies and Reports

No significant research was located that dealt specifically with in-service training of distributive education teachers. Tisdale (1969) did recommend such things as coordinators taking advantage of their communities to learn new sources of methods and techniques for teaching, learning more about team teaching and individualized instruction, and keeping up-to-date with technological changes.

Oliver (1967) completed a study which has implications for distributive education regarding the effectiveness of information feedback from students and supervisors with beginning and experienced vocational teachers. He found that: 1) there were significant differences in teacher effectiveness between those who received feedback and those who received no feedback; 2) student feedback improved teacher effectiveness while supervisor feedback did not; and 3) the most experienced teachers were least receptive to feedback. A general conclusion was that student feedback during the first 10 years of teaching can be used as an effective method of improving teacher effectiveness as seen by students. Kraffit (1967) found that human relations laboratory training was effective in changing the behavior of secondary school seminar instructors, as perceived by their principals and students.

Phillips (1968) surveyed distributive education teacher-coordinators in Indiana to obtain information that would be helpful to new teacher-coordinators in establishing a program. The information obtained was related to the concerns of first-year teacher-coordinators.

Tennyson and Meyer (1967) were the project leaders for a workshop designed to help in-service distributive education teachers focus on career development in order to help their students find satisfying roles in distributive occupations. Two general approaches were used: 1) consideration of instructional content and methods appropriate to the career development of the distributive education student, and 2) group experiences designed to focus on the career and personal development of the coordinators and distributive education teachers enrolled in the workshop. The participants had the opportunity to try out learning experiences with a demonstration class of 15 graduating high school seniors, who attended

related classes and were employed on a cooperative basis in local firms. The teachers and coordinators participated in T-Group laboratory training and received instruction in the career development process. The workshop was effective in helping the participants better understand themselves and the needs of others. They also became more group-dependent and showed less hostility. Follow-up letters were received at a later date that indicated further changes in teacher behavior.

Evaluation of Distributive Teacher Education

Only one study was reviewed that the authors felt was related to evaluation of distributive teacher education. Parker (1967) compared distributive education personnel in Utah during 1966-67 with the criteria established for distributive education personnel as reported in Warmke's 1963 study. She found high school coordinators had attained the recommended level of formal education in the areas of technical education, general and specific professional education, part-time and full-time occupational experience, and previous teaching experience. Post-high school coordinators were equally well-qualified, as were the state supervisor of distributive education and the teacher educator. None of the personnel had received supervised occupational experience, but were qualified in full and part-time occupational experience. A recommendation was that more professional distributive teacher education courses should be offered in Utah colleges and universities.

A final comment in this part is taken from the "Essex Report" (1968) which identified five emerging practices that contributed to attracting and advancing distributive teachers. They are the development or expansion of:

1. special facilities for distributive education at institutions of higher learning.
2. postgraduate teaching internship programs.
3. leadership development institutes.
4. summer programs supported by the USOE.
5. field study or occupational experience courses under the direction of teacher education institutions.

National Seminars for Distributive Teacher Education

Several national seminars were held that pertained to distributive teacher education. Ferguson (1967) was the project leader for an institute involving post-high school instructional personnel in distributive education. The objectives of the Institute were: 1) to provide advanced study of marketing concepts through a program of visitations, observations and case studies; 2) to provide study in the specialized techniques of distribution appropriate for instruction in the post-high school program; 3) to provide an understanding of curricular patterns for the mid-management distributive

education program; 4) to provide an understanding of the techniques involved in program development and operation; and 5) to help develop the skills involved in using methods and materials appropriate to the post-high school student. A set of instructional units was also developed for use at the post-high school level.

Haines (1968) was the project director for a national seminar designed to assist teacher education staffs to identify, evaluate, and respond to the implications of legislation and changes in education and distribution for preservice and in-service teacher education programs, particularly in regard to the project plan of instruction. Papers were presented and task forces developed reports pertaining to the classroom and teacher education. The major findings of the seminar were composed of the papers and the task force reports contained in three documents, namely: 1) *Readings in Distributive Education—The Project Plan of Instruction and Related Teacher Education;* 2) *Guidelines for Implementing the Project Plan of Instruction in Distributive Education in the Schools;* and 3) *Guidelines for Implementing the Project Plan of Instruction in Distributive Education Through Teacher Education.* The final report included an evaluation of the impact the seminar had made on teacher education programs 18 months later.

Vivian (1968) directed a seminar on vocational-technical teacher education. Several papers regarding distributive teacher education were presented and included in the final report.

ADMINISTRATION AND SUPERVISION

It is somewhat difficult to classify research strictly according to administration and supervision activities. Many studies are reported in the next chapter, Evaluation, that perhaps could have been classified wholly or partly in this chapter. State and local personnel continuously gather various kinds of data, but very little is written about it. Perhaps this will change in the next few years due to more formalized procedures for gathering and reporting data—procedures required by state departments of education.

The studies reported in this chapter have been divided into two groups: state-level studies and those reflecting local activities. Some studies were of a general vocational nature, but had implications for distributive education.

State Administration and Supervision

Nye's study (1967) was reviewed in detail in a previous chapter, but needed to be mentioned here as well. His study dealt with distributive education issues in distributive teacher education and one of the more important issues seemed to be centered on the relationship between the teacher educator and the state supervisor. The roles of both agents needed to be clarified.

Perryman (1967) compared certification requirements of post-high school distributive education teacher-coordinators in 33 states. He found little agreement among the states regarding minimum degree requirements, areas of preparation or background, or amount of teaching. Even though the 1963 National Clinic on Distributive Education formulated a set of recommendations for qualifications of post-high school coordinators, these recommendations were not followed closely by the states. Perryman recommended more uniformity in state certification requirements.

Row (1969) did a cost analysis of all high school distributive education programs in the State of Wyoming for the 1967-68 school year. He collected salary information on the various school officers and teachers, as well as data on expenses other than salary to obtain the average cost per student. As would be expected, costs were higher in cases where fewer students were enrolled in the program. He found the average cost per student, based on the 361 students included in the study, to be $296. It was also noted that these students had earned $258,027.64 in wages during the year, or an average of $714.76 per student. This was considered acceptable in light of the fact that most students were not employed during the first year of a two-year program.

Vandiver (1968) analyzed and evaluated selected aspects of federal guidelines and state plans established for the organization and administration of vocational education in the public schools. He found that federal guidelines did not inhibit the development of good state plans, and that states should exercise more leadership in developing effective state plans. He also called for a close working relationship between state departments of education, vocational education and institutions of higher learning.

Local Administration and Supervision

Several studies were reviewed that dealt with local administration and supervision of distributive education. The studies seemed to fall in two groups: 1) General Practices, and 2) Public Relations.

General Practices

Johnstone (1967) surveyed 84 high school principals and 20 teacher-coordinators in 40 states to determine: 1) whether or not modular, flexible scheduling had any negative or positive effect on the distributive education program; 2) factors that coordinators felt had an impact on the program; and 3) attitudes of administrators toward the distributive education program. He found distributive education programs in modular, flexible schools of from under 500 students to more than 3,000 students. Almost 60 percent of the schools on modular scheduling in Johnstone's sample had distributive education programs, and administrators in these schools felt the program was available to any student meeting the requirement. Johnstone found that the coordinators in these schools (90 percent) considered modular, flexible scheduling advantageous to distributive education, programs were not overloaded with students, more flexibility was provided for coordination and

job training, and that the distributive education work area was used for independent study. He concluded that colleges and universities should do more to prepare persons to teach in a modular, flexible scheduling situation.

Krepel (1967) prepared a descriptive analysis of the relationship which existed between Nebraska administrators and vocational education. He found their attitudes varied considerably, and that lower attitude scores were obtained for vocational concepts as compared to academic concepts. He also found they lacked knowledge concerning vocational and technical information.

Hendrix (1967) attempted to construct an instrument to be used in the collection and evaluation of data upon which to base decisions regarding the scope and character of vocational programs in individual high schools. He found the instrument could be used effectively and suggested it be published for use in local communities.

Carlson (1967) identified functions of lay advisory committees for junior college vocational education programs in the State of California. He identified 14 functions of such committees and recommended guidelines for committee operation.

Public Relations

Two studies were completed that dealt with how staff members in a school system viewed distributive education. Sheffer (1967) surveyed staff members in a Minneapolis, Minnesota, high school to determine: 1) informational knowledge possessed by personnel, and 2) the psychological feelings toward the program. She found that the staff held favorable opinions and attitudes toward the program, and that the coordinator was the most important agent in disseminating information concerning the program. However, she also found that the staff needed more information about basic facts concerning the program, as well as clearer interpretation of the goals essential to the program.

Strickland (1967) did a similar study in the Richmond, Virginia public schools. He found that three-fourths of the staff possessed a basic understanding of the areas of study in distributive education, but that 60 percent had some reservations about encouraging students with above average ability to enter the program. It was determined that personnel with graduate degrees and eight or less years of teaching experience had the highest regard for the distributive education program.

EVALUATION

The broad topic of evaluation, including the development of evaluative criteria for occupational programs, follow-up of students, and the evaluation of processes and outcomes, continued to receive a considerable amount of research attention in distributive education. Twenty-six of the

studies reported which have been completed in the past three years relate in part or parcel to some aspect of program evaluation. Emphasis here is well-placed since the evaluation of occupational programs is currently a matter of great concern to educators in vocational and technical fields. In addition to a number of degree studies and independent projects devoted to problems of evaluation, many state departments of education and writers in the field are looking for ways to more effectively appraise the results of occupational programs.

The general plan of this section of the Review and Synthesis will be to first treat the topic of evaluative criteria, then to review those studies which are of a general student follow-up nature, next to report on those studies which attempt to evaluate the processes and methods of distributive education, and lastly to deal with those studies which are mainly concerned with the evaluation of outcomes.

Evaluative Criteria

In a technical report entitled, "The Evaluation of Occupational Education Programs," Moss (1968) comments that, "Although program evaluation is essential to systematic improvement in educational efficiency and effectiveness, much of what little has been done to date in the name of program evaluation is of questionable usefulness (p. 1)." He goes on to identify and treat eight dimensions of evaluation. They are: 1) the importance of program evaluation, 2) some causes of past inactivity in evaluation, 3) a definition of program evaluation, 4) program outcomes (or evaluative criteria), 5) program characteristics, 6) two roles of program evaluation, 7) evaluation as a part of the educational change process, and 8) some research approaches to evaluation.

Moss states that the identification and measurement of the program outcomes which are to serve as evaluative criteria is one of the most critical aspects of program evaluation, and the one that has thus far probably received the least attention. He feels that what is needed is a classification schema which will help to identify the scope and boundaries of an array of relevant outcomes, and to suggest possible criteria for including specific outcomes. He then presents one such classification system with some guidelines for supplying it with appropriate criteria. First and foremost, he stresses that the criteria by which instructional programs are to be evaluated must be outcomes—the products of instruction. Program characteristics cannot be used as evaluative criteria, for by so doing, it is assumed rather than proved that those characteristics are good. The major purpose of evaluation is to determine which program characteristics actually produce the desired outcomes. The report by Moss is meant to stimulate more productive studies in the general area of occupational program evaluation.

Several state departments of education are attempting to develop new evaluative criteria or improve existing ones. The only state department study reported for this review, however, is one by the Louisiana State Department of Education (1966) which resulted in a manual for evaluating co-

operative distributive education programs in that state. It is primarily a self-evaluation device designed to improve existing programs. Though not specifically directed to distributive education, a doctoral study by Von Schaaf (1966) attempted to identify a set of guidelines for establishing and evaluating vocational and technical education programs. Data involving population, economics, legislation, and occupational and social change was researched for implications for vocational and technical education. From this information, guidelines were projected in the areas of organization, curricula, instruction, and guidance. The two studies by the State of Louisiana and Von Schaaf were the only projects reported in the development of evaluative criteria.

If, as Moss has suggested, the development of evaluative criteria is one of the most critical aspects of program evaluation, and evaluation is essential to improving occupational education, the need for more research effort concerned with evaluative criteria is apparent.

General Follow-up Studies

The follow-up of former students continues to be a widely used research technique for evaluating selected aspects of distributive education programs. Thirteen studies reviewed were at least partly dependent upon information gathered from former students, but the specific purposes of the follow-up and the type of information obtained varied greatly. The majority of the studies which followed up former distributive education students, however, sought the following kind of information: 1) number of students still working where trained; 2) those working in a related field where there was a transfer of skills and knowledge; 3) those in supervisory or managerial positions; 4) those who own and operate their own businesses; 5) the number taking additional training, or who went on for more formal education; 6) those in military service; 7) those who are married and not working; 8) those who have left the community in which they were trained; and 9) information about salaries of graduates. Shotwell and the Kansas Distributive Education Coordinators (1967) summarized this type of information collected from the graduates of Kansas distributive education programs from one, three, and five years back. Reports on 1,066 graduates indicated that training in marketing keeps graduates in their home communities and in the same fields in which they trained, since over 63 percent were so employed one to five years after graduating. Shotwell also concluded that the opportunity to advance into supervisory or management positions within five years existed, since 47 percent of the working graduates of those classes had reached those levels. As has been borne out by similar studies, a significant number of graduates take additional training at the college level; in the Kansas study this figure was over 15 percent.

In two comparable statewide studies, Miller (1966), for the State of Oklahoma and Roberts (1967), for the State of Wyoming sought information much like that collected by Shotwell. Though percentage data varied somewhat, their findings generally supported that of Shotwell. Both

found that a high percentage of those trained in distributive education do enter the occupations for which trained, that unemployment rates for graduates were low, and that a sizable proportion continue their formal education. Miller and Roberts both seemed to feel that the distributive education programs in their respective states were meeting the needs of the enrollees.

A follow-up study of distributive education graduates of Des Moines, Iowa, Technical High School by Eaton (1967) was designed for the same purpose and produced findings very similar to those from the studies just discussed. Eaton was also gratified to find that the majority of the graduates expressed the opinion that the training they received in the distributive education program had helped them in their employment. Des Moines, Iowa graduates of cooperative education training programs were also followed up by Tuttle (1965) to evaluate the program in terms of relation to post-high employment. Though not specifically directed to former distributive education students, his findings did support that of other researchers—that a high percentage of graduates of cooperative programs (62 percent) were employed on jobs relating to their core area training. His data was collected from graduates of the 1955 through 1961 period.

Two studies involved follow-ups of post-secondary distributive education students, but also attempted to see whether or not former students actually took the kind of job for which they had received training. Mansfield (1967) stated the problem as one of "determining the occupational validity of the two-year curricula of the Cooperative Distributive Education Program of the School of Distribution, Richmond Professional Institute, for the period of 1958 through 1964, in terms of current job descriptions of former students and of the vocational benefits which those students felt they received through participation." He selected a sample of 67 from the target population and used a mailed questionnaire to obtain his data. He found that 57 percent had failed to complete the program, that retailing was the most prevalent field entered by the cooperative graduates in the study, and that half of the graduates were holding positions on either the management or the supervisory level. In a post-secondary study, some aspects of which have been reported on earlier in this review, Larson (1967) attempted to compare the work experience patterns of the graduates of the two-year Retailing and Selling Program of the University of Minnesota. Although he found that a sizable percentage of the graduates of the program entered and remained in marketing and related occupations, he found that students who did not participate in the program were just as likely to enter and remain in these occupations.

The other studies reviewed which included a follow-up of former students were somewhat different from those already discussed either in type of information sought or in choice of respondence. Sethney (1967) conducted a follow-up study of those distributive education graduates who had been named as first, second, and third place winners in the National Distributive Education Student of the Year competition for the years 1957

through 1966. She gave particular attention to the influence of distributive education in the process of career development and the factor of leadership opportunities as provided through Distributive Education Clubs of America. Responses were received from 23 of the 29 individual former winners of the awards. She found that most students had enrolled in distributive education because of an interest in marketing and a desire for some work experience. The former students reported that the distributive education program presented a stimulating environment which provided significant opportunities for developing leadership skills. This was even true of a number of those students who had not displayed leadership tendencies elsewhere in their background. Seven of the 23 respondents were still in college—five of whom were taking a collegiate program in marketing. Of the 16 not in college, nine were employed in distributive occupations.

Rather than following up only distributive education graduates, Thrash (1967) surveyed all the graduates of the class of 1955-56 from Northwest Classen High School in Oklahoma to see what the graduates were now doing as compared to their plans upon graduating from high school. The implication for distributive education was to demonstrate the number of graduates who went into distributive or marketing occupations and thereby to provide support for existing distributive education programs and encourage the establishment of new ones. In general, his findings indicated that, although a large number (43 percent) were presently, or had been at some time since high school graduation, engaged in some phase of marketing, many of them had not planned on a marketing career while they were in high school or college.

A final project included in this section under follow-up studies is one by Casey (1968) who attempted to develop a method for tabulating responses to the question, "How did distributive education help you?", which was one item on the annual follow-up study of distributive education graduates done in Virginia. Since a copy of the study was not obtained for review, a detailed account of the results of the project cannot be given at this time.

Follow-up studies are useful devices for obtaining information on graduates of distributive education programs. There is, however, the danger of implying causal relationships when the evidence obtained in no way justifies them. This danger is no less real even when distributive education students are compared to nondistributive education students. Other factors have to be weighed and equations made. There appears, then, to be a challenge to distributive educators and researchers when doing follow-up studies to refine their data gathering instruments and techniques, to obtain the most appropriate information, to analyze it carefully, and to interpret it and draw their conclusions cautiously.

It would be wise, in addition, if distributive educators took heed of a word of caution expressed by Moss in his report, discussed earlier. Acknowledging the importance and usefulness of follow-up studies he states, however, that, "They should not be the only means used for collecting data on program outcomes. The impact of programs on the school, the industry,

the community, etc., are liable to escape attention unless other data collection procedures are also employed (p. 16)."

Evaluation of Process and Method

Even though overall occupational program evaluation should be in terms of outcomes, those program characteristics which provide the means by which program ends are accomplished deserve conscientious attention by vocational educators. The need to measure effectiveness, make comparisons and seek improvements in process and methodology provides ample opportunity for research projects on the part of distributive educators. Five of the studies reported for this review have aspects directly with or sufficiently related to evaluation of process and method to be included in this subsection. Some of them have been mentioned in previous sections also.

Two of these studies involved the evaluation of the project method as an instructional method in high school distributive education programs. Ferguson (1967) focused on the teaching of two competencies—economic understanding and sales comprehension—in order to compare the effectiveness of the project and cooperative methods of teaching high school distributive education. Coakley's study (1967) described the high school distributive education students' reactions to experiences through projects and project training. Ferguson found that after adjustments were made for initial differences, the scores of the cooperative method classes and the project method classes on the tests of sales comprehension were significant, with the cooperative method classes scoring higher. There were no significant differences between the scores of the two distributive education groups on the test of economic understanding. The procedure used by Coakley to evaluate the effectiveness of the project was to ask students to respond to questions that would indicate attitude, level of accomplishment, and the general reaction to project training. Teachers were also asked to indicate the area, levels, and success of projects used in their distributive education classes. According to the student respondents, projects gave them a better understanding for working in marketing and distribution. They reported the projects to be well-managed by the teacher-coordinators. Student attitudes toward the content learned in the competencies were favorable. According to the teacher-coordinators, the most effective projects were those in which there was much student involvement. The study also revealed that projects should be related to the classroom instruction and the occupational interest of the student. More project development was found to be needed in all of the competency areas.

Three other studies were undertaken to describe selected characteristics of distributive education programs with the expectation that the information provided would help to evaluate the effectiveness of existing programs. The purpose of a study by McWhorter (1967) was to compare distributive education programs in selected area vocational-technical schools in regard to: 1) organization plans and curriculum being used, 2)

enrollment in light of program admissions requirements and policies, 3) types of equipment now in operation, and 4) characteristics related to the instructional staff of each distributive education program. A normative survey of research was used with questionnaires being sent to coordinators of distributive education programs in area vocational-technical schools in USOE Region VI (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, and Oklahoma). Of 26 questionnaires mailed, 16 were returned, including five from post-high and 11 from high school programs. From his findings the author concluded that the area school concept seemed to be taking hold rather slowly in Region VI and that many students who desire training in distributive occupations are not receiving it due to the lack of available facilities. However, the programs that are being offered are taught by well-qualified coordinators who seem to be highly professional in the standards that they apply to the programs. McWhorter recommended that greater effort should be made on the part of teachers, administrators, and businessmen to see that the public understands the need for vocational-technical training facilities.

A study of the status of distributive education programs in the State of Indiana was conducted by Bush (1967). The study sought information very similar to that requested by McWhorter; it was not, however, directed exclusively to area vocational-technical schools. The findings of the study were reported earlier in this review. As a result of her findings, Bush made the following three recommendations:

1. Improvement of techniques in teaching and coordinating must be obtained through professional involvement and in-service education programs.
2. More teacher-coordinators should take additional graduate work.
3. Coordinators should have continuous involvement with the administration concerning all aspects of the program, e.g. planning, budgeting and teaching.

Peifer (1967) obtained information from coordinators and participating employers to determine whether students are adequately prepared to perform satisfactorily on their jobs and, if not, in what area or areas the coordinators and employers feel that the programs can be improved. Since the study was not obtained for this review, the authors were not able to comment on the findings as they pertain to the objectives of the study.

The design of an evaluative tool for selecting projects with potential for teaching occupational competency in rural Alaskan secondary schools was the purpose of a study undertaken by Beima (1967). He consulted literature, distributive instructor-coordinators, and specialists in distributive teacher education to identify assumed learning outcomes and general characteristics of projects as well as techniques for student use of projects. He concluded that his checklist device had value in judging the learning potential of a project and that state and local supervisors or other administrative personnel could use the checklist to judge distributive education projects to be used in federally reimbursed project method programs.

Evaluation of Outcomes

Many of the general follow-up studies discussed earlier in this section on evaluation involved an attempt to evaluate the results of distributive education programs. Those studies treated in this sub-section are those which used means other than, or in addition to, follow-up techniques to get at the problems of evaluating program outcomes.

The purpose of a study by Moore (1966) was to determine the extent to which certain aspects of cooperative part-time distributive training meets established criteria in post-secondary distributive education programs. He contacted employers, coordinators, and school administrators as well as trainee-graduates to obtain the necessary information. The reader is referred to page——for a listing of the findings.

Though none of the other studies reviewed were direct attempts to evaluate distributive education programs in terms of established evaluative criteria, there were several that seemed primarily geared to some facet of assessing outcomes rather than characteristics of programs. Duff (1966) attempted to ascertain changes in attitude of distributive education students after enrollment in an experimental tenth grade program of distributive education in Newport News, Virginia. Although his study indicated that the distributive education students had abilities in different areas than other students, he did not report any significant changes in attitudes as a result of the year of instruction.

In a study discussed earlier, Holloway (1967) compared work education students with those not in work experience programs to ascertain whether the two groups differed appreciably at the end of the school year as seen by comparisons of such factors as dropout rate, attendance, academic record, and attitude toward work. The study was basically descriptive and since the groups were not equated on other factors it was not possible to state any proof of the worth of the program. It was the belief of the author of the study, however, that the program which was in operation at Champaign High School, Champaign, Illinois was worthy of merit.

Acknowledging the increase in number, greater flexibility and wider range in curriculums of distributive education programs resulting from the Vocational Education Act of 1963, the New Jersey State Department of Education (1968) embarked upon a series of studies which were an attempt to evaluate results in terms of those changes. The information tabulated was basically a description and analysis of distributive education program characteristics as they existed in New Jersey, but it was intended to give direction to the State Department of Education in terms of program needs and development of program guidelines.

Several studies reviewed have attempted to compare characteristics and achievements of distributive education graduates with those of nondistributive education graduates. Sanders (1967), however, attempted to analyze and compare two different groups of vocational program graduates—those of cooperative occupational education programs and those of vocational-technical school programs. Comparisons were made in terms of background

characteristics, achievement, occupational and educational patterns after graduation, and average salaries. He also attempted to obtain opinions toward the programs from graduates, parents, cooperating employers, and current employers. The four high schools and the Vocational-Technical School in Springfield, Missouri provided the population for this study.

A very significant problem in undertaking program evaluation is the lack of suitable instruments for assessing results. Attempts at developing and improving evaluative criteria were discussed earlier. While not necessarily equating subject matter achievement with overall program success, a study by Hoffman (1968), who developed an instrument to assess the composite subject matter achievement of secondary cooperative distributive education students, is an example of research directed to helping solve problems of evaluation. The development of this achievement instrument involved three stages: 1) determination of measurable instructional objectives in distributive education, 2) development of an instrument to measure student accomplishment of the objectives identified, and 3) trial of the instrument. Statements of objectives and content of distributive education were drawn from a review of the literature and submitted to Ohio coordinators for validation. The instrument was developed from this data and submitted for evaluation and validation to a group of non-Ohio distributive educators. The instrument was then submitted to secondary senior distributive education students on a pre and post-test basis. As a result of his findings, Hoffman concluded that there was a high level of agreement among Ohio coordinators concerning the objectives, program phases, and instructional content of cooperative distributive education at the secondary level; also, that it is possible to develop an instrument which can measure the related composite subject matter learning of distributive education students. He felt that his findings supported the proposition that more effort should be made by distributive educators to specify instructional objectives and to isolate the effect of their educational program on the accomplishment of those objectives.

In concluding this section on evaluation, the authors were pleased to see increased attention given to research connected with evaluative devices and procedures. It is hoped that in addition to continuing work on all aspects of evaluation, more specific attention can be focused in measuring outcomes of distributive education programs.

MISCELLANEOUS STUDIES

Four of the studies reviewed did not appear to fit comfortably into any of the previous categories; therefore, they are being treated separately. Three of these, which will be mentioned first, were not basically distributive education studies but did have implications for distributive education. The fourth, a doctoral study by Palmer (1967), was a distributive education study. It will be reviewed last.

A description of marketing activity in a given geographic area with particular emphasis placed upon trends and changes can provide useful information to distributive educators in planning new programs, redesigning or expanding existing ones, and in matters of curriculum development. Such a study, done by Lounsbury (1967), was primarily undertaken to assist Kansas businessmen in making decisions regarding location, expansion, product lines, etc. It also can serve to keep educators advised of changes in patterns of retail trade activity.

Since occupational values of youth are always of interest to vocational educators, a study by Carney (1967) had an interesting uniqueness. He hypothesized that the occupational values of juvenile delinquent boys would differ from the norm, that the difference would be in terms of giving the greater valuation to those factors which promised material rewards, and that the greater the experience of delinquency, the further from the norm these values would be. The hypothesis was tested by asking experimental and control groups to rank occupational values in order of importance. The groups were matched with respect to age, race, I.Q., and occupational level of parents. The results did not support the hypothesis.

Some studies involving instrument design were discussed earlier. A study by Hendrix (1967), however, was to construct an instrument to be used to collect data upon which to base decisions regarding the scope and character of vocational programs in individual high schools. By reviewing literature for philosophy, objectives, principles, purposes and trends in vocational offerings, then drafting a list of categories of needs and validating the list by a jury of experts, an instrument was constructed which could be used by school administrators and school boards in planning vocational programs.

A final study included in this section, and specifically distributive education in nature, was one by Palmer (1967). He attempted to determine those opinions of Montana secondary school administrators and business educators which might account for the difference between the enrollment in the Montana distributive education program and employment in Montana in the distributive occupations. The literature was surveyed and interviews were held with leading Montana educators to obtain information for an opinion questionnaire which was then administered to school board chairmen, superintendents of schools, high school principals, guidance counselors, and business education teachers. Findings indicated that Montana secondary school administrators and business educators do not feel that the lack of business cooperation should be a limiting factor to the local distributive education program. Rather, factors other than those relative to the opinions of these people were the major limiting factors in the establishment of that program in Montana schools.

SUMMARY OF RESEARCH

Most of the research that was located for this review was of a descriptive or comparative nature, and a great deal of it was considered to be develop-

mental. This is probably due to the fact that most persons who completed research during the three-year period were relatively inexperienced researchers. This does not mean beginning researchers are not needed in the field, but does seem to indicate the need for a greater number of persons who are sophisticated enough to undertake more complex forms of research design. It was the opinion of the authors that the research training institutes sponsored by the USOE would have had more of an impact on the type of research done during the period. However, after further thought, the authors felt the time span was too short to notice any great difference. Perhaps a greater length of time is needed to have an appreciable effect on the field. The three-year time span covered in this review may also be too short in terms of determining major trends and outcomes for research. A suggestion may be to do the review and synthesis of research for a five-year period.

A healthy effect of the emphasis on research was the fact that information on completed studies was comparatively easy to obtain. The authors found that abstracts and completed studies were fairly accessible from the desired sources, which provided an opportunity to get fairly complete coverage of completed research. This was also possible due to better record-keeping for research such as is found through the ERIC system. It was evident that graduate advisers and researchers were maintaining better summaries of their research and making this information available to more people. However, it seems appropriate to encourage graduate advisers, particularly, to require abstracts or summaries of studies done under their guidance. In this way, the information could be easily obtained without a great deal of effort.

The authors found some difficulty in categorizing the reported research. It was evident that some studies logically fell into more than one category and had to be discussed several times. This may be beneficial to persons doing research, especially when completing a review of the literature. Several persons reported that the initial reviews were used extensively by graduate students and others who were completing studies.

The Nature of Research Done During 1966-68

It was mentioned that most studies reported on were descriptive or comparative in nature. It is still evident that more experimental studies are needed to provide direction for researchers and curriculum builders in the field. Forty-nine doctoral dissertations were reviewed, but not all of them dealt exclusively with distributive education. A healthy sign is that of those concerned with distributive education, two degree studies were experimental in nature. These were the doctoral studies done by Ferguson (1967) and Roberson (1967). A third study considered to be experimental was the funded study done by Trimpe and Dannenberg (1966). Meyer and Logan (1966) attributed the lack of experimental research to inadequate measuring instruments. This may still be the case as practically no research was done in the area of developing such instruments. It may also be that distributive

education researchers will have to initially look to other fields for assistance and guidance. Many good studies have been done that have important implications for the field, and that could serve as a basis for planning new research designs.

Evaluation of Outcomes

A great deal of emphasis was placed on evaluation and follow-up studies. However, most of this research centered around characteristics rather than outcomes. Therefore, it is difficult to determine whether or not programs are accomplishing what they are supposed to accomplish. There is a definite trend toward the evaluation of outcomes, but as yet appropriate devices and procedures have not been developed to accomplish the task. The work done by Crawford (1967) should serve as the springboard to undertaking research designs and procedures that will center on outcomes of the students rather than on their characteristics. Again, it may be necessary to examine what has been done in other fields, possibly outside the field of education, in order to broaden research horizons concerning evaluation. It also means that appropriate measuring instruments should be constructed that are different from the typical survey instruments and comprehensive tests.

A notable exception was evident in the studies done by Klaurens (1967) and Stolhanske (1968). They attempted to evaluate outcomes by examining the extent of job satisfaction experienced by distributive education students. They centered on the person and his reaction to the work environment which carries beyond the classroom. Their work was facilitated by the fact that there were appropriate instruments to use in measuring the results, and that a computer program had been developed to do the statistical analysis.

Another example of utilizing computer hardware was in the study done by Lundell (1968). He developed a system for coding information and storing it so that additional information could be added or efficient retrieval made of previous data that had been collected on students. However, this information was still based on characteristics rather than on outcomes. Nevertheless, the use of electronic data processing will continue to have an impact on the nature of research due to the efficient processing of large amounts of data.

Progress in Distributive Education Research

There seems to have been an increased amount of attention given to research in distributive education judging from the number of studies that were completed during the three-year period. Meyer and Logan reported a growth in activity during the six-year period, 1956-62, and particularly during 1962-66. This trend continued, especially in the area of master's degree studies and other kinds of research such as funded studies. The number of studies in each category are reported in Table 1.

TABLE I
DOCTOR'S, MASTER'S AND OTHER STUDIES IN DISTRIBUTIVE EDUCATION, 1965-68

Year	66	67	68	Total
Doctor's Studies	2	17	4	23
Master's Studies	9*	23	19	51
Other Studies	6	18	22	46
Total	17	58	45	120

* Does not include the studies reported by Meyer and Logan for 1966.

The figures in Table I include only studies that were clearly distributive education studies. In addition to the number of studies listed, 26 doctoral studies were reviewed which, though not specifically distributive education, had implications important enough to warrant including in the report. Six of the studies listed under "other" studies were not research studies but rather were research papers or articles. Also included were 28 studies sponsored by the USOE or state departments of education.

Areas of Research

Indicated in Table II are the number of references made to doctoral studies (D), master's studies (M), and other kinds of studies (O), according to the 11 content areas and by the year in which the study was completed. It should be kept in mind that a study may be referred to in more than one subject area which would account for a total greater than that found in Table I.

TABLE II
REFERENCES MADE TO STUDIES REPORTED BY YEARS AND SUBJECTS

Subject Area	65	66	67	68	Total
I. Philosophy and Objectives					
D		1	1	1	3

M					0	
O		1	1		2	
Total	0	2	2	1	5	(2.9%)
II. Manpower Needs and Employment Opportunities						
D			2		2	
M		1	3	4	8	
O		1	1	2	4	
Total	0	2	6	6	14	(8%)
III. Curriculum Development						
D	1	1	7	2	11	
M		3	7	6	16	
O		1	4	5	10	
Total	1	5	18	13	37	(21.4%)
IV. Educational Programs						
D	2		3		5	
M			1		1	
O					0	
Total	2	0	4	0	6	(3.5%)
V. Instructional Materials and Devices						
D			1		1	
M		1			1	
O			3	4	7	
Total	0	1	4	4	9	(5.2%)
VI. Learning Process and Teaching Methods						
D			4	2	6	
M		2	3	3	8	
O		1	4	1	6	
Total	0	3	11	6	20	(11.6%)

VII. Student Personnel Services						
D	1		8		9	
M	1		2	4	7	
O			1		1	
Total	2	0	11	4	17	(9.8%)
VIII. Teacher Education						
D			9	2	11	
M			3	3	6	
O		1	4	3	8	
Total	0	1	16	8	25	(14.5%)
IX. Administration and Supervision						
D			4	1	5	
M			4		4	
O				1	1	
Total	0	0	8	2	10	(5.8%)
X. Evaluation						
D	1	3	3	1	8	
M		1	4	1	6	
O		2	8	2	12	
Total	1	6	15	4	26	(15%)
XI. Miscellaneous						
D			3		3	
M			1		1	
O					0	
Total	0	0	4	0	4	(2.5%)
Total by Year						
D	5	5	45	9	64	
M	1	8	28	21	58	
O	0	7	26	18	51	

Total	6	20	99	48	173	(100%)

D - Doctor's Degree
M - Master's Degree
O - Other Studies

It is interesting to note in Table II that about the same number of references are made to studies reported in each of the three areas—doctoral, master's and other research. Doctoral studies were referred to most often in the areas of philosophy and objectives, educational programs, student personnel services, teacher education, administration and supervision, and evaluation; master's studies tended to contribute more in manpower needs and employment opportunities, curriculum development, and learning processes and teaching methods. Independent studies made contributions in the areas of curriculum development, instructional materials and devices, learning processes and teaching methods, teacher education, and particularly evaluation.

It should be recognized from Table II that no studies were located to report on in the area of "Facilities and Equipment."

The number of studies in each of the 11 major areas and the percent are shown in Table III. Once again it should be kept in mind that the frequencies do not represent the total number of studies completed, but the number of times studies were referred to in each of the categories.

TABLE III
FREQUENCIES WITHIN AREAS OF RESEARCH

1. Curriculum development	37	(21.4%)
2. Evaluation	26	(15.0%)
3. Teacher education	25	(14.5%)
4. Learning processes and teaching methods	20	(11.6%)
5. Student personnel services	17	(9.8%)
6. Manpower needs and employment opportunities	14	(8.0%)
7. Administration and supervision	10	(5.8%)
8. Instructional materials and devices	9	(5.2%)
9. Educational programs	6	(3.5%)
10. Philosophy and objectives	5	(2.9%)
11. Miscellaneous	4	(2.3%)
12. Facilities and equipment	0	(0.0%)
Total	173	100%

The greatest amount of research effort was in the area of curriculum development, followed by studies in evaluation and teacher education. Meyer and Logan (1966) listed the areas of greatest concentration as learning processes and teaching methods, student personnel services, and curriculum development. It is evident that curriculum development and evaluation moved up in importance, which reflects the emphasis on specific research during the three-year period. The areas of facilities and equipment, philosophy and objectives, and educational programs received little attention. The area of facilities and equipment needs more research attention. Distributive educators talk a great deal about the need for adequate facilities and equipment, particularly for instruction under the project plan, yet they do not pay much attention to it when undertaking research projects. It would also seem that more emphasis should be given in the area of educational programs if instruction is geared to emerging kinds of distributive occupations. A healthy sign is the contribution that was made in the area of evaluation. This seems to have reflected the thinking of vocational educators as they became more aware of the importance of sound evaluative procedures.

Recent Developments

Vivian (1968) directed a research planning conference for distributive education at The Center for Vocational and Technical Education at the Ohio State University in 1967. An important task was the development of a program matrix that would serve as a system for achieving specific objectives through research. Participants in the conference gave attention to identifying areas of research, assigning research priorities, and developing the general system (matrix) for distributive education curriculum research. As far as the authors know, only one study involves utilizing the matrix, and that is the ongoing research under the direction of Crawford. It would appear that this system has merit and should be used to a greater extent in planning and conducting research in distributive education.

Areas of Needed Research

Several of the persons that were contacted during the time information was being collected for this report, had suggestions for needed research in distributive education. The research planning conference directed by Vivian listed curriculum development as a high priority area and proceeded to develop a research matrix for this area. Further efforts should be made to utilize the matrix and to conduct studies within this realm.

Some of the other areas that were suggested as needing research attention were:

1. The realistic and effective collection of occupational data upon which to base program development and expansion activities including school and non-school sources of information.
2. Experimental research designed to determine the most effective ways to prepare persons for distributive occupations, e.g. cooperative versus non-cooperative.
3. Research on the competencies and behaviors that are necessary to be an effective teacher of distributive education, and the structure for a teacher education program that would develop these competencies and behaviors.
4. Experimental research designed to determine the best ways to prepare certain kinds of persons, such as the disadvantaged for specific kinds of distributive occupations.
5. Evaluation of program effectiveness based on student outcomes, rather than on program or student characteristics. This may include using the cost-effectiveness approach that is currently being tried by vocational educators.
6. The development of predictive tools to determine the relationship of certain elements of an instructional program in distributive education.
7. Experimental research designed to measure the effectiveness of certain kinds of facilities and equipment, such as a model store, in training distributive workers.
8. Effective means to assess the quality, quantity, and type of occupational experience required to be an effective teacher, and how to structure programs for obtaining this experience.

The summary has indicated that total research activity is increasing. The greater diversity of research projects in both purpose and design is encouraging. Though attention has been called to the scarcity of experimental projects, this is in no way meant to discourage non-experimental studies. Thorough descriptive information continues to be essential to distributive education, as it is to all fields. The increased availability of studies coupled with more and better abstracts and summaries made the project easier to complete. Ready access to information about prior work relieves researchers of unnecessary preliminary labor, reduces duplication and thereby permits concentration of effort where it belongs—on new issues and problems.

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